COMMUTING IN A NEW CENTURY

Phase 1 Report: Initial Study of Suggested Transportation Improvements

Supplemental Public Comments

Table of Contents

Introduction		1
Chapter 1	Public Comments Received After December 31, 1991	5
Chapter 2	Selected Public Comments Reprinted from the Primary Phase 1 Volume for Legibility	101

Introduction

This volume is a supplement to *Commuting in a New Century, Phase 1 Report: Initial Study of Suggested Transportation Improvements.* Commuting in a New Century is a broad transportation-planning effort of which the most important product will be a revised Program for Mass Transportation (PMT). This planning effort is described in detail in the abridged version, provided below, of the executive summary of the primary Phase 1 report. As explained in the summary, one of the functions of that report was to present written comments received from the public. This supplemental volume presents the written comments that were received too late to be included in the primary Phase 1 volume (published December 31, 1991).

Phase 2 of the process was completed on March 31, 1992. The Phase 2 document, *Commuting in a New Century, Phase 2 Report: Research Themes for the Program for Mass Transportation,* has organized the public suggestions into research themes for study during Phase 3.

A copy of the primary Phase 1 report and of the Phase 2 report can be viewed at the State Transportation Library, on the second floor of the State Transportation Building (10 Park Plaza, Boston), and at main-branch public libraries in Boston, Cambridge, Framingham, Lynn, Malden, Norwood, Quincy, Stoughton and Waltham.

Abridged Executive Summary of the Primary Phase 1 Report

Rush hour congestion makes getting to our jobs a job in itself. To make tomorrow's commute better than today's, the Executive Office of Transportation and Construction (EOTC) has begun a broad transportation planning effort called "Commuting in a New Century." This effort will study all modes of travel. Phase 1 of the study assembled suggestions from the public on possible improvements in commuting through a series of Transportation Town Meetings.

The "Commuting in a New Century" planning effort was initiated because of the need to revise the Program for Mass Transportation (PMT), which is the capital improvement plan for the Massachusetts Bay

Transportation Authority. The original PMT, produced in 1966 and revised in 1976-78, resulted in the Red Line extension from Harvard to Alewife, the Orange Line relocation in the Southwest Corridor, a large number of smaller-scale improvements to all parts of the MBTA system, and the MBTA's current capital program.

EOTC, recognizing that improvements to one mode may benefit other parts of the interdependent transportation system, decided to broaden the PMT revision process to include all modes of travel. The Federal government supports intermodal transportation planning, and based on the comments at the public meetings, private citizens feel that it is important to integrate transportation modes so that they work in concert.

Since a revised PMT will be one of the products of the Commuting in a New Century study, the process for the broad study has been structured in accordance with the prescribed PMT revision process, found in section 5(g) of Chapter 161A of Massachusetts General Laws. As stipulated in the legislation, EOTC has been working in cooperation with the MBTA and in consultation with the Executive Office of Communities and Development, the Massachusetts Highway Department, the Metropolitan Area Planning Council and the MBTA Advisory Board. These six agencies compose the Working Committee which has been meeting to carry out the process since the summer of 1991.

The Working Committee has outlined a four-phase work program:

Phase 1 - Assembling ideas for possible improvements in commuting
Target completion date - Dec. 31, 1991
Phase 2 - Reviewing and sorting these ideas for further development
Target completion date - Mar. 31, 1992
Phase 3 - Intensive analysis of selected ideas
Target completion date - June 30, 1993
Phase 4 - Analysis of remaining ideas
Target completion date - June 30, 1994

Summary of Phase 1

The purpose of Phase 1 was to solicit private individuals' viewpoints on commuting. A number of steps were taken to ensure that all interested commuters were heard. First, an advisory committee made up of public interest groups was convened. Second, several thousand brochures, which included a questionnaire on commuting, were distributed. Finally, eight Transportation Town meetings were held.

To form the Advisory Committee, a list of transportation-related and environmental organizations was assembled and each was invited to

participate in the study. Membership in the Advisory Committee remains open. As of December 31, 1991, it was composed of forty-seven agencies and organizations that represent a wide range of opinions and membership. In order to represent the needs of commuters and travelers who reside outside of the urban core of the Boston region, the Advisory Committee contains all of the regional planning agencies and regional transit authorities in eastern Massachusetts. *[Note: A list of Advisory Committee members is included in the primary Phase 1 report.]*

The duties of the Advisory Committee are two-fold. First, the Committee is expected to meet periodically to offer review and guidance during each of the four phases of the PMT process. Second, each Advisory Committee representative is expected to keep his or her membership informed of the activities of the revision process.

Approximately 8,000 brochures were produced promoting the Transportation Town Meetings and also including a survey form on commuting. People were encouraged to mail in their comments and ideas if they could not attend one of the meetings. Brochures were sent to all local elected officials within the proposed study area, to all planning boards and public works departments in the cities and towns within the MBTA district, and to each Senator and Representative in the Massachusetts Legislature. Advisory Committee members distributed brochures to their organizations. Brochures were also made available at various public locations such as town halls and local libraries.

As a further promotion for the Town Meetings, the MBTA Marketing Department displayed 200 posters at rapid transit stations and distributed flyers on the seats of commuter rail trains. To produce as broad an outreach as possible, the eight Transportation Town Meetings were held in locations spread throughout the metropolitan region: meetings were in Framingham, Lynn, Boston, Stoughton, Quincy, Malden, Waltham and Norwood.

Each of the Transportation Town Meetings began with a presentation by transportation agency officials and staff. The presentations included a slide show on demographic trends in the region, remarks by the Program Advisor to the Study, and a description of the process of the PMT revision. Handouts were distributed describing the study area for each corridor and describing:

- transit projects recently completed,
- projects currently underway,
- proposed projects subject to available funding, and
- potential future projects.

The handouts were intended to serve as a starting point for discussion. *[Note: These handouts, and minutes of the meetings, are included in the primary Phase 1 report.]*

1. Public Comments Received After December 31, 1991

This chapter contains the public comments received after December 31, 1991, the initial deadline for all Phase 1 submittals. While the vast majority of comments were received before the deadline and therefore included in the primary Phase 1 report, an extension of the comment period was granted to accommodate late arrivals.

All of the comments in this chapter, as well as those in the primary Phase 1 report, were incorporated into the Phase 2 document, *Commuting in a New Century, Phase 2 Report: Research Themes for the Program for Mass Transportation.*

The numbering sequence begun in the Phase 1 report has been continued for the additional comments presented here, which were sent by the following people:

96 - Senator Robert Hedlund
97 - Daniel J. Lauzon, Brotherhood of Locomotive Engineers
98 - Malcolm Davis, JRTC
99 - Jody Young, MBTA Advisory Board, Newton
#100 - William Crawford, MBTA Advisory Board, Nahant
#101 - Edward O. Nilsson
#102 - Charles Bahne, Committee for Regional Transportation
#103 - John F. Deacon, Sierra Club
#104 - Denise Provost
#105 - Robert S. Sturgis
#106 - Mark Keigwin
#107 - Chairmen, MAPC Subregions
#108 - Joseph Pagano
#109 - David Pelletier
#110 - Chris Toire
#111 - [unsigned]

Comment #96

COMMONWEALTH OF MASSACHUSETTS
MASSACHUSETTS SENATE
STATE HOUSE, BOSTON 02133

SEN. ROBERT L. HEDLUND
NORFOLK AND PLYMOUTH DISTRICT
ROOM 416 B, STATE HOUSE
TEL. 722-1646

COMMITTEES:
COMMERCE AND LABOR
TAXATION
PUBLIC SAFETY
COUNTIES

December 16, 1991

Secretary Richard Taylor
Executive Office of Transportation
and Construction
10 Park Plaza, Room 3510
Boston, MA 02116

Dear Secretary Taylor:

In my view, two events in particular in my district have far-reaching ramifications in the shaping of transportation policy:

1. A non-subsidized commuter boat alternative from Hingham.

2. Inauguration of boat service on a daily (weekday) basis back and forth between Nantasket and Boston in the morning and evening, also non-subsidized.

In addition to providing an alterative commute alternative, service to and from Hull is going to aid Hull and other communities in the Hull, Cohasset, Hingham, Weymouth, Quincy, Braintree corridor build "destination economies".

Nantasket Beach is a major trip attraction. Rather than "dead-heading, that is, running empty on the return run, boats leaving Boston in the morning can bring day trippers. Day trippers could return on the afternoon boats. In this manner the important goal of achieving "balanced ridership" could be more nearly achieved.

Let us be quite clear in our minds that it is the large imbalance in ridership, that creates the need for a large operating subsidy. By emphasizing the Nantasket/Boston link, we could start to dismantle the structure of operating subsidies as passengers are carried in both directions and as it becomes possible to operate at a profit out of the fair-box.

But there is a need to aid these fledgling efforts, and this is where the Program for Mass. Transportation should step in, I'm talking of the need for land-slide coordination; we need an integrated land transit/ferry system.

It is helpful to visualize our mass transit system as consisting of

a circumferential corridor reaching from the tip of Hull to Braintree intersected by numerous radial links, water and land connecting to Boston.

I would therefore strongly hope that the Program for Mass. Transportation consider such measures as:

1. Timed transfers, boats and trains should be met by buses, and reliable feeder service should also be provided.

2. Weekend bus service to Nantasket beach, a regional recreational magnet, none is currently provided.

3. Through bus service from Hull to Quincy and the South Shore Plaza to serve the large numbers of persons who don't have cars; students and the elderly.

4. A uniform fare collection system such as a debit card system (as proposed by the Privatization Task Force) and to overcome the current pattern of multiple fares.

Thank you in advance for your consideration.

Very truly yours,

Robert L. Hedlund
State Senator
Norfolk-Plymouth District

RLH/rk

Comment #97

Brotherhood of Locomotive Engineers

DANIEL J. LAUZON
LEGISLATIVE REPRESENTATIVE
DIVISION 57

Mr. Robert Sloane, E.O.T.C.
Mr. Matthew Coogan, Program Advisor
Mr. Geoff Slater, C.T.P.S.

December 30, 1991

Re: PMT Comments

Dear Sirs,

As Legislative Representative of the Brotherhood of Locomotive Engineers, I represent the locomotive engineers who operate the commuter rail system (CRS). We feel confident that our opinions will carry a little weight. Over the years we have observed the enhanced commitment to commuter rail improvements compared to what it was in the early seventies. My position officially mandates, by our constitution, that I devote my time to issues regarding safety, sanitation and political education. I take that broad scope to mean that as far as the CRS is concerned I must continually ensure that logic and prudence are adhered to. Unfortunately, due to the fact that for political reasons the use of consultants is the rule, the following is in the best interest not only of locomotive engineers, but of the citizens as well.

As the prime movers of the CRS, locomotive engineers are the ultimate end-users of most design concepts, and unlike the designers we must endure any flaws in the project for the life of the plant. Although I know that due to the very political nature of labor organizations we tend to make poor consultants, I do believe our organization to be the exception. The following is a condensed list of design/ consultant/ purchase/ placement flaws:

1) Windshield wiper motors are air driven, right out of steam engine era, and are thus subject to frequent failure.

2) Windshield wiper motor control valves, on some control cars are over-sophisticated to the point they cause utter destruction of the windshield wiper system.

3) Locomotive control stands are designed as standard O.E.M. freight locomotive control stands in such a way that when installed into their intended GP-type carbody, work exceptionally well. However in CRS they are silly at best.

4) Air Brake Exhaust: The fact is that CRS design specs call for no exhaust of trainline brake pipe air in the cab. Current design causes a dangerously loud condition to exist on most MBTA locomotives. The problem is that they

were designed improperly and now it becomes a bureaucratic nightmare to change the specs. Excessive exhaust noise has led to both personal injury and many near misses.

5) Control Car Seats: They are so poorly designed that leg circulation is cut off as they are too high and do not provide anywhere to rest the feet, which are left to dangle.

6) Over-sophisticated communication systems: They are so overdone electrically and electronically that they fail. The simplest system is the buzzer yet it is the first to fail!

7) Radios: Never has the MBTA gone to those who maintain radios for their opinion and yes, you guessed it!

8) Wayside Signals: There is no doubt that more thought goes into signal circuit design than virtually any other electrical system on a railroad, and certainly none is more regulated, but I am always dumbfounded as to the illogical placement of the most critical part, the signal itself. Asimple query to this office before the foundation is installed could prevent many potential disaster areas such as those that now exist or are in the final stages of installation.

9) Communication with passengers: Public address systems at suburban stations are, due to the "help" of unqualified consultants, a joke. Ma Bell stands ready with superior systems to solve this much needed adjunct.

In closing, although I realize what I am asking for is a lot, let the record show that I have asked for it.

Yours truly,

Daniel J. Lauzon
BLE Legislative Reprsenetative
7 Landmark Lane
Rockport, MA 01966

Comment #98

MEMORANDUM

To: John Noorjanian, CTPS

From: Malcolm Davis, JRTC

Date: 21 January 1992

Re: Comments on Phase 1, Program for Mass Transportation

I sense a quickening of interest in expanding rail service in the US. I was pleased to learn that the federal government has set aside $30 million toward the reintroduction of rail service north to Portland, Maine. Additionally, I understand that $250,000 has been earmarked to study the connection by rail of North Station and South Station. From the 17 January 1992 Advisory Committee meeting for the Program for Mass Transit, I gleaned from reading Attachment B - Progress Since Last PMT (Phase 2, Draft) that circumferential transit within a 5 mile radius of downtown Boston, in a corridor to be identified through the planning process, is being considered to link existing radial lines and activity centers (p.4-19).

I would like to suggest that the connection between North Station and South Station be considered in the same corridor as circumferential transit. I am very concerned that the downtown will be overburdened, its historic peninsular quality overwhelmed, if we attempt to plan another circulation system through its limited space. The below grade Central Artery and all its attendant access ramps and vent structures will impose many constraints on the 'urbanity' of Boston. Fitting in a railroad system with its own vent structures and emergency exits may so alter the feeling of the downtown as to leave it undesirable. The circumferential railroad corridor study may allow a fresh look at Amtrak's expansion into northern New England providing traveller convenience while also nurturing the city.

Comment #99

MBTA Advisory Board

120 Boylston Street, Suite 504, Boston, Massachusetts 02116 617/426-6054 FAX 617/451-2054

To: Bob Sloane

From: Jody Young, Newton Designee to the Advisory Board

Re: Additional project for consideration in the PMT

Date: January 28, 1992

Please add to the list of possible projects:

Circumferential bus service on Route 128, operating between approximately Route 9 and Route 93 with stops on all cross radials, providing connections to frequent (every five minutes?) van service into employer lots and office parks.

JY/al

15 Howe Road
Nahant, MA 01908
January 31, 1992

Ms. Anne Larner, Executive Director
MBTA Advisory Board
120 Boylston Street #504
Boston, MA 02116

Dear Anne:

As you requested at the Advisory Board Annual Meeting earlier this week, I have reviewed the "Commuting in a New Century" Phase I Report Executive Summary. I recognize that this study is still in its early stages, with much more work planned prior to formulating a Transportation Master Plan for in the region. If still available, please request a copy of the complete Phase I Report ("Initial Study of Suggested Transportation Improvements") for my review.

In my scanning of the Executive Summary, I did not see any specific references to the Town of Nahant and its transportation needs. Without any formal solicitation of input from Nahant residents or elected officials to provide you the "quick" input you asked for, my discussions in the past have brought out the following points as important to Nahant residents:

- More Nahant-Lynn bus service beyond that offered now (twelve Monday thru Friday round trips) is desirable, particularly for the young people, the elderly, and for those unable to drive. In the future, if demand warrants, more Route 439 weekday service, and resumption of weekend service should be considered.

- Those MBTA Nahant buses which are currently through-routed to/from Boston should be retained. There are now five morning trips which continue through Lynn enroute to Boston. Three evening buses originate at Boston Haymarket Square and continue through Lynn to Nahant. These through-routed buses offer Nahant-Boston commuters a "one-seat ride", which is very attractive to these commuters. The buses carry additional passengers from/to Lynn and along the route to/from Boston, and they are very, very heavily patronized, particularly on the Boston end of the route.

Certainly not of unique interest to Nahant residents, the extension of the Blue Line to Lynn (which <u>is</u> mentioned prominently in the report) is a key priority transit improvement to the metropolitan region.

Please forward these "quick" added thoughts to the project planners. If clarification is required, I may be reached during business hours on 594-3082.

Very truly yours,

William Crawford, Designee
MBTA Advisory Board
Town of Nahant

cc: Selectmen - Town of Nahant

Comment #101

Edward O. Nilsson & Associates Architects
Member of the American Institute of Architects
28 Naugus Ave. — Marblehead, Mass. 01945

tel: office (617) 631-5452
fax (617) 631-5459

February 14, 1992

Ms. Sonia Hamel
Central Planning Transportation Staff
Ten Park Plaza, Suite 2150
Boston, MA 02116-3968

Re: Program for Mass Transportation
Rivervision 2020: A Charles River Basin Master Plan

Dear Ms. Hamel:

Thank you for sending me a copy of the Phase 1 Report on Commuting in a New Century. Regarding the mass transit components of Rivervision 2020 (Blue Line and Green Line extensions) I enclose a copy of a Boston Globe editorial with recommendations for further study.

As the presentation of Rivervision 2020 at the Regional Core Town Meeting last October was very brief, my colleagues Craig Bell, Bruce Campbell, and I would be pleased to review some of the additional material with you in further detail. For example, the plan also envisions redevelopment of the riverfront with a seasonal water-taxi (or Venice/Paris-like vaporetti) which could absorb some future growth in commuter capacity.

Thank you again for your assistance in this matter.

Very truly yours,

Edward O. Nilsson

Edward O. Nilsson, AIA

EDWARD O. NILSSON & ASSOCIATES, ARCHITECTS/PLANNERS

Encl.

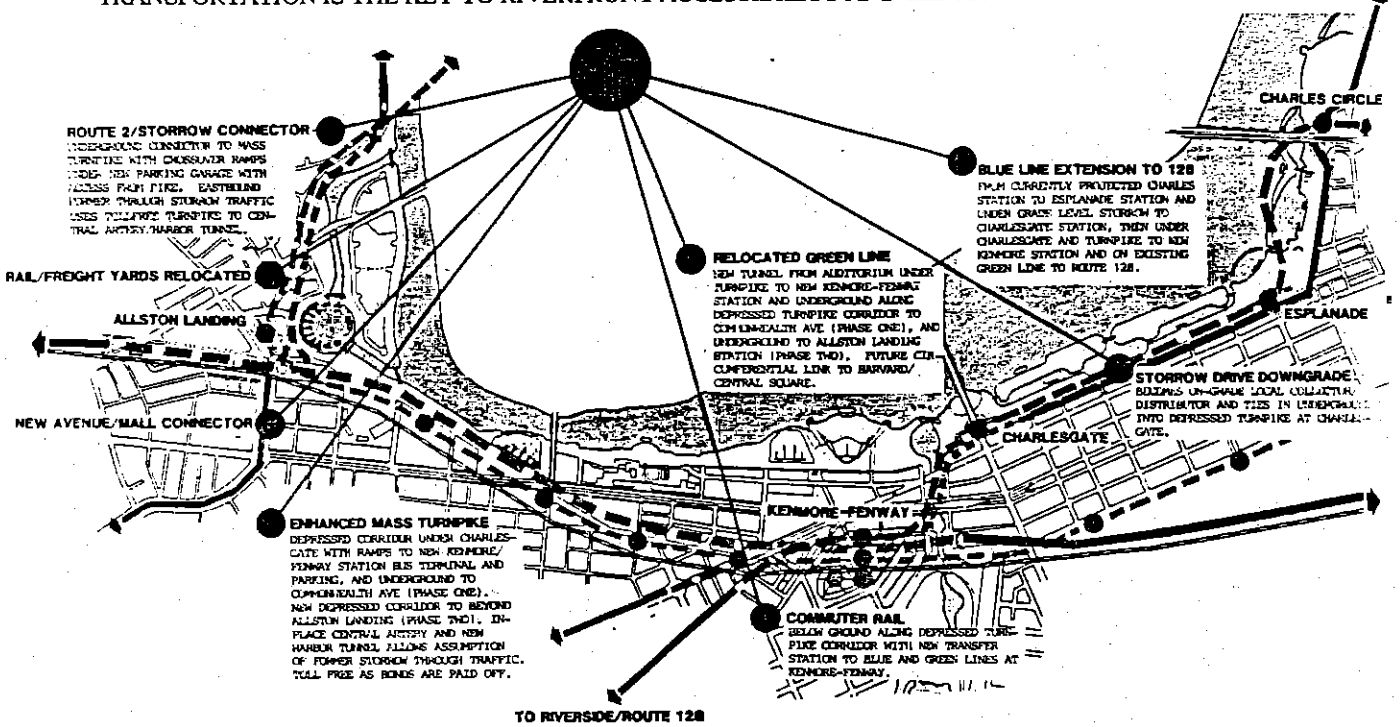
P.S. I call your attention the misspelling of my name in the Report.

RIVERVISION 2020: A Charles River Basin Master Plan

Rivervision 2020 is a comprehensive long-range plan for Boston's Charles River Basin and its immediate surroundings. The key issues addressed in the plan include:

- **Extending the Blue Line subway** to provide direct access to the riverfront, parallel downtown transit service in the westerly corridor, and regional linkage between suburbs and Logan Airport, and
- **Downgrading Storrow Drive** to reunite F.L. Olmsted's 'Emerald Necklace' at Charlesgate where the 1950's overhead highways obliterated the riverfront Esplanade's connection to the inner Fenway parkland area.
- **Restructuring transportation at Kenmore Square** and the Massachusetts Turnpike corridor, and
- **Recapture the riverfront** for expanded recreational and cultural resources.

TRANSPORTATION IS THE KEY TO RIVERFRONT ACCESSIBILITY AND KENMORE REDEVELOPMENT.



Edward O. Nilsson Associates, Architects & Planners

Principal	Edward O. Nilsson, AIA, Architect/Planner
Design Team:	Craig B. Bell, RA, Architect/Planner
	Bruce Campbell, P.E., Transportation Planner
Consultants:	Robert L. Ossman, ASLA, Landscape Architect
	Dr. Paul Valihura, Planner
	Tuck Willis, The Art Institute

RIVERVISION 2020:

TABLE OF CONTENTS

1. A CHARLES RIVER BASIN MASTER PLAN
2. MASS TRANSIT - THE BLUE LINE CONNECTION
3. THE BLUE LINE EXTENSION TO KENMORE SQUARE - AN OPPORTUNITY TO RESTRUCTURE STORROW DRIVE
4. THE EMERALD NECKLACE RESTORED
5. RESTRUCTURE THE MASS. TURNPIKE CORRIDOR
6. KENMORE SQUARE AS A MAJOR TRANSPORTATION NODE
7. KENMORE SQUARE DEVELOPMENT NODE
8. NEW RIVERFRONT AMENITIES
9. KENMORE LANDING AND THE PERFORMING ARTS CENTER
10. BROOKLINE LANDING AND BOSTON UNIVERSITY
11. ALLSTON LANDING AND NEW TOWN CENTER
12. FINANCIAL FEASIBILITY
13. PUBLIC ACCESS FOR THE RIVER

RIVERVISION 2020:

1. *A CHARLES RIVER BASIN MASTER PLAN*

Carried out under the auspices of the Boston Society of Architects 'Boston Visions Program', Rivervision 2020 projects a view of the Charles River Basin and adjacent neighborhoods as they could appear in the year 2020. This thirty year 'vision ' transforms the Charles River Basin from today's little more than photogenic foreground for the Boston skyline into a crucial center element of transportation systems, cultural and recreational activities, and extensive neighborhood renewal and development.

Rivervision's dual goals are a major transportation restructuring at Kenmore Square and the Mass. Turnpike corridor, and greatly expanded recreational resources and accessibility along the Charles River. To achieve these objectives a logical sequence of planning initiatives on a broad front have been targeted - including mass transit, highway and pedestrian systems, green space linkage, water resources and urban development potentials. Each of these categories has been separately analyzed, and the necessary steps for implementation have been diagrammed and related to the overall objectives.

Although these steps are mutually linked, the specific proposals are not predicated on a rigid step-by-step process. The focus is rather one of problem solving in a way consistent with parallel issues, and the overriding objectives of greater accessibility and enhanced use of the Charles River Basin. The comprehensive plans and perspective portray the Charles River Basin as it might appear in say, 2020, and show in vivid detail how these various systems reinforce each other and together greatly enhance the quality of life of the Basin and of Greater Boston.

2. *MASS TRANSIT - THE BLUE LINE CONNECTION*

A long standing bottleneck of the Boston rapid transit system is the lack of a circumferential transit network; the Red, Green, Orange and Blue lines all interface in the congested adjacent stations of Park Street, Government Center and Washington Street. In particular the Blue Line terminates in downtown Boston (Bowdoin St.) and does not link its northern stations to a southern extension as do the other lines, severely curtailing its effectiveness as a link to Logan Airport.

The Rivervision 2020 proposal takes the Blue Line from its currently projected terminus and Red Line connection at Charles Circle and continues the Line to Kenmore Square, sweeping out in an arc under the Basin to 'cut and cover' stations at roughly the Hatch Shell and Mass. Ave. bridge. A major new Kenmore Square station adjacent to the Turnpike corridor (on the scale of the new Alewife Station in Cambridge) permits transfer to the Green Line, commuter rail, bus system and major air rights parking. Beyond Kenmore Square the Blue Line appropriates the Riverside Green Line right of way (the gauges of the Blue and Green lines are compatible) an thus completes a heavy rail extension to Route 128.

The appeal of this potential is the obvious capital savings beyond Kenmore Square of reuse of the Green Line while catapulting the underused Blue Line into a major north-south people mover servicing Logan Airport, and with an important transfer node at Kenmore Square to other systems.

RIVERVISION 2020:

3. *THE BLUE LINE EXTENSION TO KENMORE SQUARE - AN OPPORTUNITY TO RESTRUCTURE STORROW DRIVE*

The insertion of Storrow Drive into the Charles River Esplanade created a barrier to riverfront accessibility from Boston neighborhoods. The new Third Harbor Tunnel and reconnections of the Turnpike to the downtown Expressway will greatly ease traffic flow to Logan Airport from the south and west and effectively reorder traffic through downtown to points north.

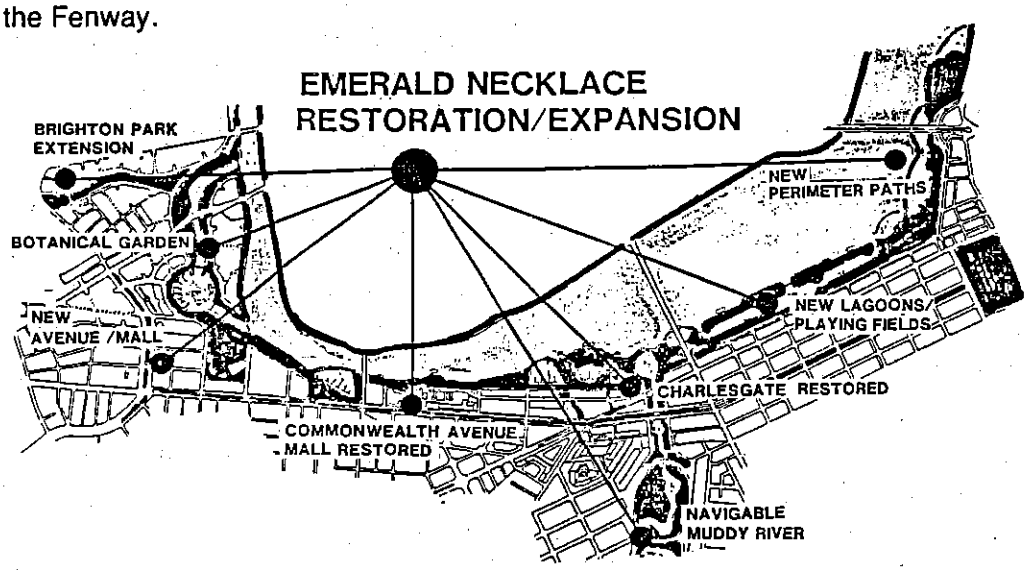
An extension of the Blue Line in a cut and cover operation to Kenmore Square calls for a reevaluation of Storrow Drive as a through arterial connector to points north from the Kenmore vicinity. The Blue Line construction could permit the downgrade of Storrow Drive to a local signaled boulevard on the scale of Beacon Street or Commonwealth Avenue, with pedesrtian crossings at grade level. It would even be feasible for the downgraded Storrow Drive to follow the Blue Line construction and link directly to the Turnpike at the Charlesgate/Kenmore Square Station node.

The accompanying plan shows a greatly expanded lagoon system with supporting recreational resources reflecting the increased use and accessibility of the Esplanade to the city. The cross-section indicates the relationship of the Blue Line and a local Storrow 'Boulevard' to the Esplanade.

4. *THE EMERALD NECKLACE RESTORED*

One of the more desirable objectives of Rivervision 2020 is to restore the severed link of F.L. Olmsted's 'Emerald Necklace' at Charlesgate. The Blue Line extension and the realignment of Storrow Drive offer an unprecedented opportunity to reunite the Necklace at Charlesgate, where the spaghetti of overhead highway construction in the 1950's obliterated the connecting link of the Riverfront Esplanade to the Fenway via the Muddy River.

The dual underground realignment of the Blue Line and Storrow Drive into Kenmore Square and the creation of a major new transportation node in Kenmore Square would make possible a direct on-grade pedestrian and landscape tie from the Charles River to the Fenway. This would strengthen the highly desirable objective of providing greater and easier accessibility of the Charles River Basin to the inner neighborhoods of Boston beyond the Fenway.



RIVERVISION 2020:

5. *RESTRUCTURE THE MASS. TURNPIKE CORRIDOR*

The Blue Line extension to Kenmore Square, and the possible concurrent realignment of Storrow Drive to a Mass. Turnpike connection at Kenmore Square suggests a further analysis of the Turnpike corridor west of Kenmore. At present the Turnpike is depressed at the Prudential Center, at or slightly below grade from Massachusetts Avenue to the Boston University Bridge, and elevated from the Boston University Bridge at Commonwealth Avenue to River Street in Allston, where the Turnpike descends again to grade level. The potential for depressing the Turnpike from Massachusetts Avenue to River Street, and combining the realignment into a mulit-use transportation corridor, has significant impact for the Charles River shoreline, Commonwealth Avenue, air-rights development, and for major development at 'Allston Landing.'

The drawings illustrate how this potential could be realized. The Turnpike, Storrow Drive, commuter rail and Green Line are stacked in the Turnpike realignment on two levels below grade. This has the following ramifications for the neighborhoods between Kenmore Square and Allston Landing:

1.) The Charles River embankment is restored as a greenbelt at its narrowest point west of Kenmore Square.

2.) Boston University, the Armory site, and Bay State Road neighborhood would have a 'front door' on the Charles River.

3.) Commonwealth Avenue is restored as a landscaped mall west of Kenmore Square, similar to the appearance of the street in the Back Bay.

4.) The Green Line is renovated with new stations onto the Turnpike corridor, serving more closely adjacent residential neighborhoods, Boston University, and the new air-rights development.

5). The air-rights development of affordable housing between Kenmore Square and the Boston University Bridge will more closely link the inner neighborhoods to Commonwealth Avenue and make the recreational facilities on the Charles River more accessible.

6. *KENMORE SQUARE AS A MAJOR TRANSPORTATION NODE*

The schematic section shows how a major multi-level transportation node can be accommodated in a restructured Turnpike corridor adjacent to Kenmore Square. The lowest level includes the new MBTA Blue and Green Lines; the commuter rail service and the Mass. Turnpike/Storrow Drive share the first level below grade. Grade level permits pedestrian accessibility from the Fenway/Audubon Circle neighborhoods directly into Kenmore Square, and would include at the Station retail and public service facilities.

Above grade includes a multi-level parking facility including direct access from the Turnpike for private vehicles as well as MBTA bus drop-off connections to the transit levels. Additional air-rights levels could include office and hotel functions depending on economic feasibility.

RIVERVISION 2020:

(6. *KENMORE SQUARE AS A MAJOR TRANSPORTATION NODE* - Continued)

Since the highway and transit levels occur below grade there is no longer a transportation 'wall' separating the river and recreational accessibility from the Fenway and inner neighborhoods. In fact the air-rights development could include affordable housing to help knit together the neighborhood fabric for which the Turnpike has proven so divisive.

The transportation node envisioned is a 'mega-node' on the scale of Alewife/Route 2/Red Line magnitude. By making possible Green/Blue Line and commuter rail/bus transfers the critical importance of the new node in the overall mass transit/Logan Airport/Route 128 commuter corridor will help support the Kenmore Square air-rights development.

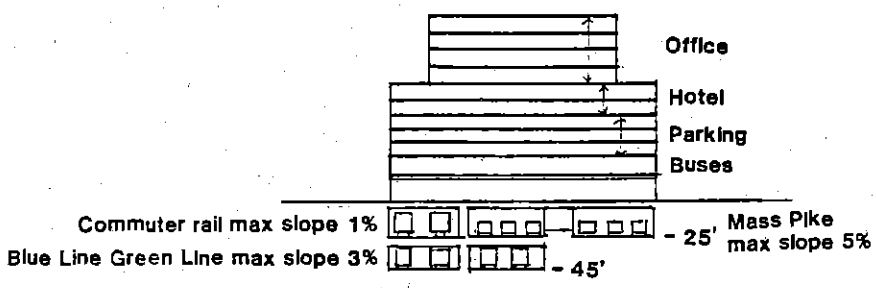
7. *KENMORE SQUARE DEVELOPMENT NODE*

The major new Green/Blue Line/commuter rail and bus station at Kenmore Square is critical to the proposed air-rights and major adjacent development in the Kenmore Square/Commonwealth Avenue area. Kenmore Square itself would be transformed from a major local retail and office area into an important new Boston urban center, a destination and 'point of entry' into Boston proper. Such a transformation would generate housing, public service, and neighborhood renewal in the adjacent area and thus will have a significant spillover impact for the economy of the area.

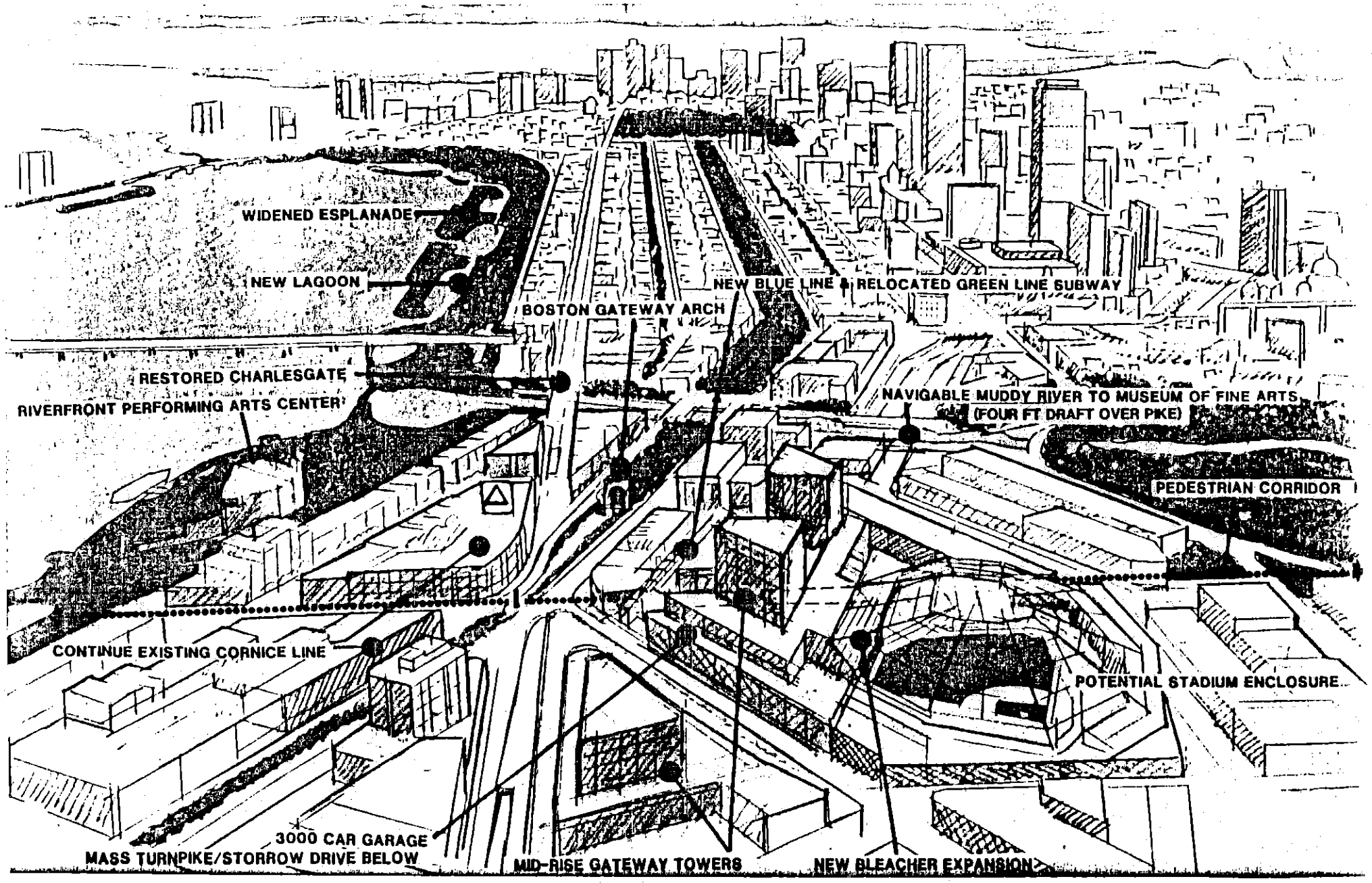
Preliminary analysis indicates a strengthening of the current uses of Kenmore Square (particularly as upscale entertainment and cultural uses, and professional and medical offices) as the key to increasing the Square as a destination retail and restaurant center. Such an impact would suggest the concurrent development of sufficient hotel and convention facilities, given the immediate accessibility of the Turnpike, and of Logan Airport and Route 128 via the extended Blue Line.

The Square itself will become an attractive, landscaped and desirable urba center on the Commonwealth Avenue mall. Because the bus terminal and MBTA station are now south of the Square at the Turnpike corridor, through traffic from Beacon Street or Brookline Avenue can occur <u>under</u> the Sqaure in the old station area, freeing the Square for pedestrian use.

Kenmore Square will be symbolic as a gateway to Boston proper and recognition of the Square as a focal point of radiating avenues (Commonwealth, Brookline, and Beacon) could be acknowledged by a civic structure on axis, and a symbolic gateway arch, as shown on the perspective and detailed plan.



SECTION AT KENMORE-FENWAY STATION


WIDENED ESPLANADE
NEW LAGOON
NEW BLUE LINE & RELOCATED GREEN LINE SUBWAY
BOSTON GATEWAY ARCH
RESTORED CHARLESGATE
RIVERFRONT PERFORMING ARTS CENTER
NAVIGABLE MUDDY RIVER TO MUSEUM OF FINE ARTS
(FOUR FT DRAFT OVER PIKE)
PEDESTRIAN CORRIDOR
CONTINUE EXISTING CORNICE LINE
POTENTIAL STADIUM ENCLOSURE
3000 CAR GARAGE
MASS TURNPIKE/STORROW DRIVE BELOW
MID-RISE GATEWAY TOWERS
NEW BLEACHER EXPANSION

RIVERVISION 2020:

8. *NEW RIVERFRONT AMENITIES*

The downgrading of Storrow Drive into a local collector/distributor from Charles Circle to Charlesgate and the rerouting of the link west of Charlesgate onto the Turnpike corridor greatly expands the usable area of the embankment and opens the Charles River and its uses to the inner neighborhoods of Boston.

One of the principal goals of the plan is to increase and diversify the river and its importance to the neighborhoods. The plan proposes a series of riverfront centers - a Charlesgate Basin at the confluence of the Muddy River, a Kenmore 'Landing' adjacent to Kenmore Square, a Brookline 'Landing' at the Boston University Bridge, and a major Allston 'Landing' and town center on the railroad and trucking yards in Allston. These landings would be destination centers and could include marinas, public boating, restaurants, and public facilities, and they would be connected by a water bus 'vaporetti' type public transport on the Charles River.

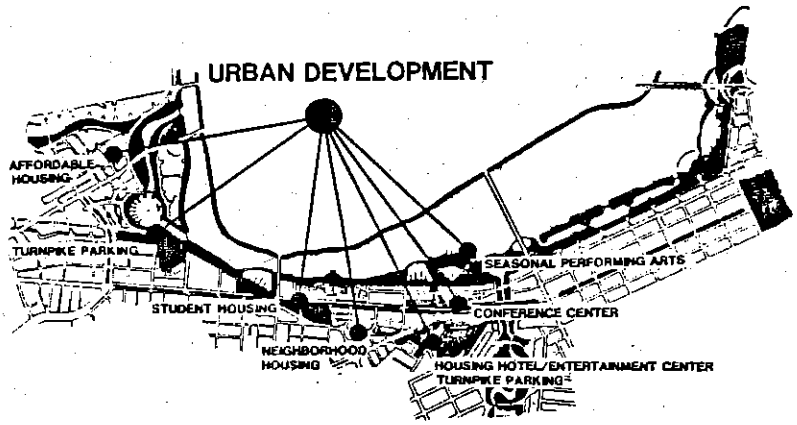
Since the Charles River is a basin the water volumes must be maintained relatively constant for flood control. The increased water area provided by the 'Landings' and by the extension of the Basin up the Muddy River (and over the depressed Turnpike) permits landfill elsewhere along the Esplanade for additional recreational and cultural facilities. These could include additional lagoons (to complete the Back Bay system), playing fields, public boating, and bird and waterfowl habitats.

9. *KENMORE LANDING AND THE PERFORMING ARTS CENTER*

Major public riverfront use is proposed adjacent to Kenmore Square and the new Kenmore Landing in the form of a seasonal performing arts center. Such a facility would draw upon the major new transportation node and expand upon one of the current major characteristics and uses of the Square, its entertainment and restaurant component.

The depression of the Turnpike and rerouting of Storrow Drive permits much easier public accessibility to the Basin. We propose to continue the Deerfield Street alignment through the center axis of the Square as a pedestrian corridor connecting the new MBTA station, Fenway Park, and the Fenway itself on a direct link via Ipswich Street.

A performing arts center would be the centerpiece of the Basin renewal, and would offer maximum use for what the riverfront was originally intended, the enjoyment and pleasure of the public. Possibly such current festivities as 'Concerts on the Common' could be held at the center with much less disruption on surrounding neighborhoods than currently occurs. Public accessibility would also be provided by the water bus service.



RIVERVISION 2020:

10. *BROOKLINE LANDING AND BOSTON UNIVERSITY*

As one of the new 'neighborhood center' facilities proposed for the Charles River, a Brookline Landing strengthens the objective of linking waterfront uses back to the inner neighborhoods, a linkage currently prevented by the Turnpike corridor and Storrow Drive. The Landings would offer access to boating and to pedestrian, jogging, and bicycle routes along the embankment.

The rerouting of Storrow Drive in this stretch has a far reaching impact on Boston University. The Charles River Basin will now be the front door of the campus in many respects, and the opportunities for reconsideration of potential development sites and their orientation and circulation is subject to new evaluation. As sketched here in plan the formal Ralph Adams Cram Gothic revival campus could have its formal landscaped counterpart on the river.

In addition the new riverfront amenities proposed such as a performing arts center, the riverfront botanical garden, or fresh water marine biology center can enlist the support and participation of the neighboring universities and their communities.

11. *ALLSTON LANDING AND NEW TOWN CENTER*

Major urban development is proposed for the Allston Landing site. Since the Turnpike corridor from Massachusetts Avenue to River Street will be depressed, air-rights development on a large scale is possible at Allston Landing. In addition the realignment of Storrow Drive via an underground link to connect with the Turnpike, the demolition of vast areas of elevated concrete and steel expressways, and the reclamation of land dedicated for toll collection by means of currently available AVI (Automatic Vehicle Identification) systems, will free large amounts of land for redevelopment.

We propose the creation of an urban center for Allston, which will give the neighborhood definition and provide an opportunity to coalesce the various public services of the community into a 'town center.' The existing River Street viaduct can be reused as a bridge for the creation of a major inland lagoon, greatly expanding the recreational potential into the inner neighborhoods.

Retail, office, and parking development can occur over the Turnpike, providing a buffer to Boston University on the east. Affordable and market housing can be built adjacent to 'greenbelt fingers,' seen on the site plan, which penetrate inland to the southern boundaries of the site. To facilitate vehicular accessibility a major landscaped avenue has been shown which conects Commonwealth Avenue and Brighton Avenue to the town center via Malvern Street.

The Green Line station, following the realignment of the line into the Turnpike corridor could terminate in the center with direct access to the Turnpike via a major parking facility. In the future the Green Line could be extended to connect to the Red Line in Cambridge, further reinforcing the metropolitan area's circumferential transit links.

RIVERVISION 2020:

12. *FINANCIAL FEASIBILITY*

While extension of the Blue Line, rerouting Storrow Drive and congregating east-west traffic modes into a single corridor will not be inexpensive, the total costs will not be out of line from similar large scale transportation projects in Boston. The dismantling of the overhead expressways in Charlestown, the construction of the Third Harbor Tunnel, or depression of the Central Artery arew projects of similar or greater magnitude and also provide a financial and environmental return to the city which compares favorably to the high initial capital construction costs.

The financial underpinning of Rivervision 2020 will tap a variety of sources given the diverse components which will be involved in the carrying out of the proposal. The highly composite nature of financial support, involving federal highway and/or transit funds, Massport, state and other potential bonding, and private development resources make it more likely the project can be realized. For example, the interests of rerouting Storrow Drive in tandem with the Blue Line extension could make the project more feasible since more funding sources would be available.

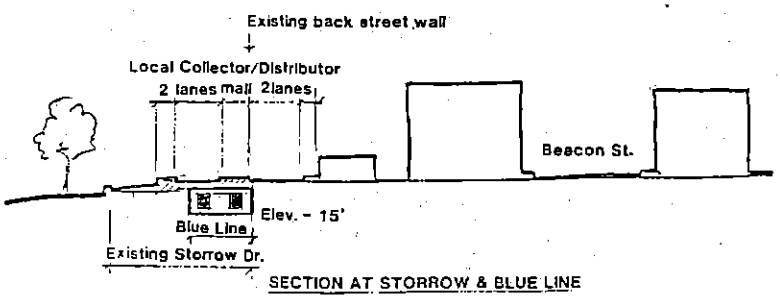
This composite approach should be aggressively pursued in bringing to fruition the Rivervision 2020 concepts.

13. *PUBLIC ACCESS FOR THE RIVER*

An overriding goal of this proposal has been the greater use of the Charles River Basin to the greater benefit of all citizens in the metropolitan area. This means not only removal of facilities which prevent this, such as Storrow Drive , or increased or new uses, such as performing arts center, but also most importantly greater public accessibility.

This has been achieved in Rivervision 2020 through the Blue Line extension with stations along the Esplanade to Kenmore Square and Route 128, by the development of neighborhood landings and the removal and congregating of transportation nodes onto the Turnpike corridor. For the Charles River itself, we propose the development of public transit water routes, with fast frequent headways. This waterbus/vaporetti service would link the landings and their adjacent transit stations with the major river facilities and neighborhoods on both sides of the river, from the Museum of Science to Harvard Square and beyond, and up the newly navigable Muddy River into the Fens and to the Museum of Fine Arts.

The confluence of these proposals will place the Charles River Basin as the centerpiece of an attitude of what makes Boston unique in the public mind, in a way that Central Park (which, like the Emerald Necklace, was also designed by F.L. Olmsted) symbolizes the heart of Manhattan.



SECTION AT STORROW & BLUE LINE

Comments on the Phase 1 Report of "Commuting in a New Century" Revision of the Program for Mass Transportation

submitted by Charles Bahne
on behalf of the Committee for Regional Transportation, Inc.
February 27, 1992

(1) Corrections to the summary list of projects in Chapter 5 of the Phase 1 Report

After comparing the comments from the public that were reprinted in the Phase 1 Report (including my own comments submitted as an individual) with the summary list of comments that were printed in Chapter 5, I have noticed three discrepancies. These are:

1. Under VIII.C.1. the second item listed is "Discontinue bus service between Lexington and Waltham." [No citation is given for the source of this comment.] This service was discontinued by the MBTA in late 1989. At that time the MBTA promised that, instead of through service between these two towns, connecting service would be available using MBTA Bus 70A from Waltham Central Sq. to North Waltham, and then the MBTA-subsidized Lexpress bus to Lexington Center. However, the connecting service was never implemented. There is a gap of several blocks between the end points of the two routes, and schedules of the routes were never coördinated. My guess is that the comment should really be "*Restore* bus service between Lexington and Waltham."

(2) Under III.D.1., page 5-11, about 2/3 of the way from the top, one of my comments is listed as "Waterfront subway connecting North and South Station, with stops at Aquarium and Rowes Wharf." (Source citation 60.) The original suggestion, however, was for a *surface* light rail line along this alignment. See page 4-79.

(3) Under IX.C, page 5-27, one of my comments is listed as "Build ferry boat docks at North End Park (Commercial Street, Boston)." (Source citation 60.) This is incorrectly listed under "C. More efficient use of existing services." It should correctly be listed under "D. New services/ Innovations" and should include reference to operating seasonal shuttle boat service from this site to the Charlestown Navy Yard (preferably Pier 1, if it is possible; otherwise Pier 4) directly across the Charles River.

(2) Additional suggestion

My original comments did not include rerouting of bus routes, since I thought that the focus of the PMT was limited to capital projects. However, given the large number of suggestions from other commentors for new or rerouted bus service, I would like to add the following suggestion if it is still possible at this date:

• *Through bus service between Malden (Orange Line) and Davis (Red Line).* This could be accomplished by combining the Medford Sq.–Malden Ctr. portion of existing MBTA bus #101 with either MBTA bus #94 or #96. Bus #101 would then operate only between Medford Sq. and Sullivan.

(3) Comment on arrangement of "Rubber Tire Transit Solutions" under sections VI, VII, and VIII of Chapter 5

Trackless trolley service should be listed as a separate category from "bus service"— just as "jitneys/local shuttle buses", "better connections", "parking expansion", and "high occupancy

vehicle facilities" are listed separately. This is because new or extended trackless trolley service requires a capital expense for construction of overhead wire, where new or extended bus service requires no capital outlay.

(4) Geographic, rather than modal arrangement

The present arrangement of suggested ideas is mode (rail, rubber tire, boat, or "alternative") and then by broad geographical area (urban core, suburban to urban, or suburban). However, in a number of cases the list includes several different ideas which attempt to address the same problem, but which differ in the mode that is suggested. In these cases, the present organization makes it difficult to see that these ideas are in fact related. The arrangement by mode also makes it different to visualize intermodal improvements which would focus on a single geographic area or corridor.

The report should include an additional list of major issues by geographic area, supplementing the existing list by mode. Such a geographic (or corridor) arrangement would allow the PMT staff and Advisory Committee to examine parallel solutions to the same problem, regardless of mode, and then to pick the solution which works best for that problem.

Following is a brief list, which is not intended to be exhaustive, that I have compiled of some geographic/"corridor" issues. These include issues raised by other commentors or by myself in the PMT process to date, as well as issues raised in previous years by comments at MBTA public hearings, EIR comments, newspaper editorials and letters to the editor, etc.

• Riverside Line capacity improvements — including extension of the Blue Line, or new branch of the Orange Line, using existing right-of-way between Fenway Park and Riverside.

• Washington Street replacement service — light rail *vs.* trackless trolleys, including potential extension from Dudley Square to Mattapan Square.

• South Boston Piers transitway — light rail *vs.*trackless trolley, and connection with Green Line at Boylston.

• Waterfront transit — improved local transit on the surface between North and South Station (bus, trackless trolley, light rail, "historic light rail" as in Seattle). [Note; This is a separate issue from the underground intercity/commuter connector between North Station and South Station.]

• Massachusetts Avenue corridor — bus service improvements, future potential for new subway line (Red Line branch).

• Watertown Line corridor — restoration of light rail on all or part of line; bus service improvements; new trackless trolley service; extension of Harvard–Watertown trackless trolley to Newton Corner; new commuter rail station at Newton Corner.

• Rail access to Logan Airport — intercity/commuter rail line from north via branch off Rockport/Ipswich Line; intercity/commuter rail line from south via new cross-harbor tunnel from South Station; Blue Line branch or loop to serve terminals directly.

• Wonderland–Lynn corridor — extended Blue Line; commuter rail improvements; bus service improvements.

• Circumferential transit line(s) — route and mode.

# # # # # # #

SIERRA CLUB
Greater Boston Group
3 Joy Street, Boston, MA 02108
(617) 227-5339

Additional Comments on the PMT - 2/28/92

- We would agree that an extension of the Green Line off the present Riverside Line west of Newton Highland Station, and along the old New Haven Railroad branch line to a point in Needham, is a potential project well worth the inclusion in the PMT. This line would not only increase access to points in Newton, Brookline and Boston served by the Riverside Line, but would also open transit access to a high density suburban corridor with significant traffic congestion. In terms of cost, it may very well prove to be a very effective use of resources, as well as addressing both core and suburban transportation concerns.

- However, the above project again raises concerns about the capacity of the Central Subway(Green Line) through the Back Bay and downtown Boston.
  Over the years a good case has been made that Green Line service is a very attractive option, both in terms of increased ridership and costs, for certain existing and potential corridors. In order to accommodate ridership and service increases, it is important at this time to investigate ways of increasing efficiency given present conditions, and possible structural changes that may need to be done in the near future to increase capacity.
  The old system of trying to limit growth in the Central Subway by discouraging new extensions or by abandonment of existing branches, to deal with real or imagined capacity problems, is counterproductive - a case of " throwing the baby out with the bath water ".

- We must also raise concerns about another proposal to deal with capacity problems - Rivervision 2020. We cannot see how a transit project that manages to pass up most of the activity centers in the Back Bay, at great cost, to be worthy of further discussion.

- In our comments on the BRA's <u>Boston 2000, A Plan for the Central Artery</u>, we stated " The idea of building major transportation terminals while at the same time discouraging development on adjacent empty parcels of land is contradictory, and this policy needs to be reviewed." This was directed at parcels adjacent to South Station that the BRA was recommending to be zoned as open space/parkland. The zoning has since been adopted, I believe, but is no less contradictory and we would like a discussion of this issue.

- We also agree with several speakers at yesterday's meeting who asked for a more focused mission statement. We are at a crucial turning point in the way transportation and land use planning is done in this country. It's no longer possible to say we can have a " balanced transportation system " consisting of different modes going their separate ways. Difficult choices must be made and this is not reflected in the mission statement.

- In line with the above, suburban growth areas that want to have " some or more transit service " must plan their development to make this request reasonable. Widely sprawled out retail and commercial development, based totally on the single occupant vehicle, is no candidate for any form of public transportation beyond ridesharing or an occasional ceremonial shuttle bus service.

- We are also in agreement with Mr. Chait's comments on the necessity of coming up with new strategies to finance both the construction and operation of present and future transit services.

- If HOV facilities are proposed for the Southeast expressway in the vicinity of the Boston City Hospital area, they should be coordinated with the needs of the circumferential line also planned for this area.

- The South Boston Piers Transitway project should have its own reserved right of way on the Northern Avenue side of the Fort Point Channel at least up to the Fish Pier.

- And once again: A North - South rail tunnel must be built as part of the CAP/THT projects and in the same alignment. This tunnel would allow through Northeast Corridor services to Maine and New Hampshire, as well as the establishment of a regional commuter rail system. This is the most important transportation issue now facing all of New England.

Sincerely,

John F. Deacon

John F. Deacon
Transportation Chair

Comment #104

Denise Provost
Attorney at Law
20 Albion Street
Somerville, MA 02143
(617) 628-1130

Robert Sloan
Central Transportation Planning Staff
Executive Office of Transportation & Construction
10 Park Plaza
Boston, MA 02116

March 2, 1992

Dear Mr. Sloan:

I submit for inclusion in the Supplement to the Program for Massachusetts Transportation, now in preparation, these proposed public transportation projects in the City of Somerville:

1) Station and Scheduled Stops at Lowell Street, Somerville, on the Lowell Line of the Commuter Rail
This proposal calls for the construction of a simple station stop adjacent to the Lowell Street Bridge, near Magoun Square in Somerville, on undeveloped land of which some portion, if not all, currently belongs to the MBTA. Another important part of this project would be the acquisition of an underdeveloped adjoining 75,000 square foot parcel, now in private ownership, and its development as a parking area for about 200 vehicles. Both locations are shown on the attached maps.

2) Station and Scheduled Stops near Union Square, Somerville, on the Fitchburg Line of the Commuter Rail
This proposal calls for the construction of another simple station stop in the vicinity of Union Square, Somerville. The precise site of this stop is still under consideration.

Some of the desirable features of these projects are:

- Need and Value to the City and People of Somerville
The geographic center of Somerville is densely populated, thick with automobiles, and sorely underserved by public transportation. Presently, the city bears all the burden of having rail lines cut through it, but the benefits are enjoyed only by the residents of western and northern suburbs. From West Medford, the trip to North Station takes 12 minutes and costs $2.00 round trip, full fare; from most of Somerville, the same trip is a roughly 35 minute journey, by bus and subway, costing $2.90 round trip.

- Low Capital Costs of Projects
  By using lands already owned by the MBTA and providing simple ramps, steps, and platforms at stops, these projects make the valuable existing resource of the commuter rail lines available at low capital cost to thickly settled urban centers. This improved, convenient service will enhance the quality of life for existing mass transit users, and will doubtless lure many drivers from their cars at what will amount to a very small investment per rider and per trip.

- Ease and Low Capital Cost of Providing Handicap Access
  Somerville currently has only one subway station, at Davis Square in the western part of the city. That station is accessible by handicapped persons when its elevators are functioning. The regularly scheduled buses that run in the city are simply not accessible.

  The commuter rail trains are inherently more useful to handicapped persons. The trains are roomier, have personnel available to assist, and can be approached by ramps and platforms designed to allow straightforward access.

Thank you for your kind attention to this matter. I would appreciate your keeping me informed of the status of this request.

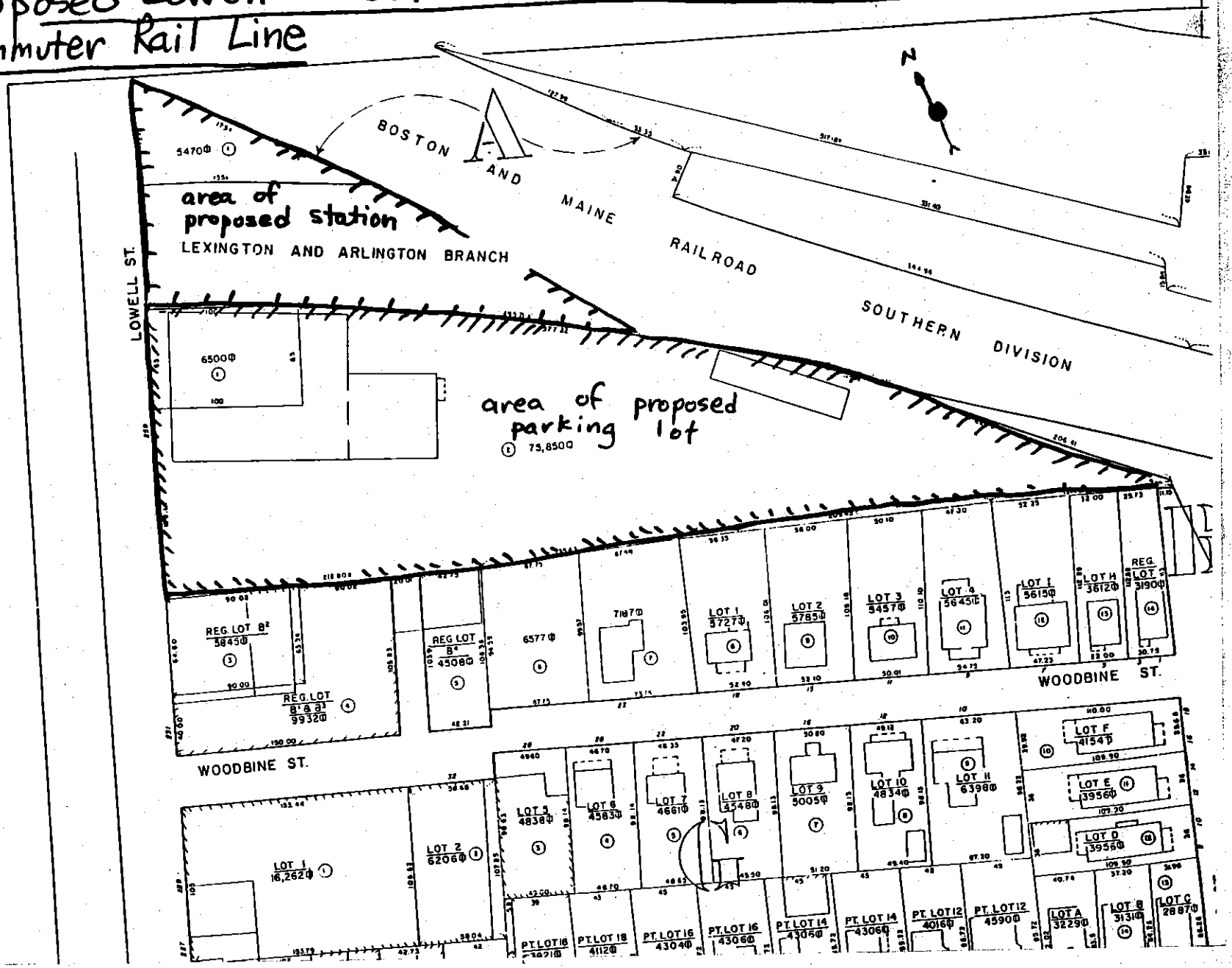
Very truly yours,

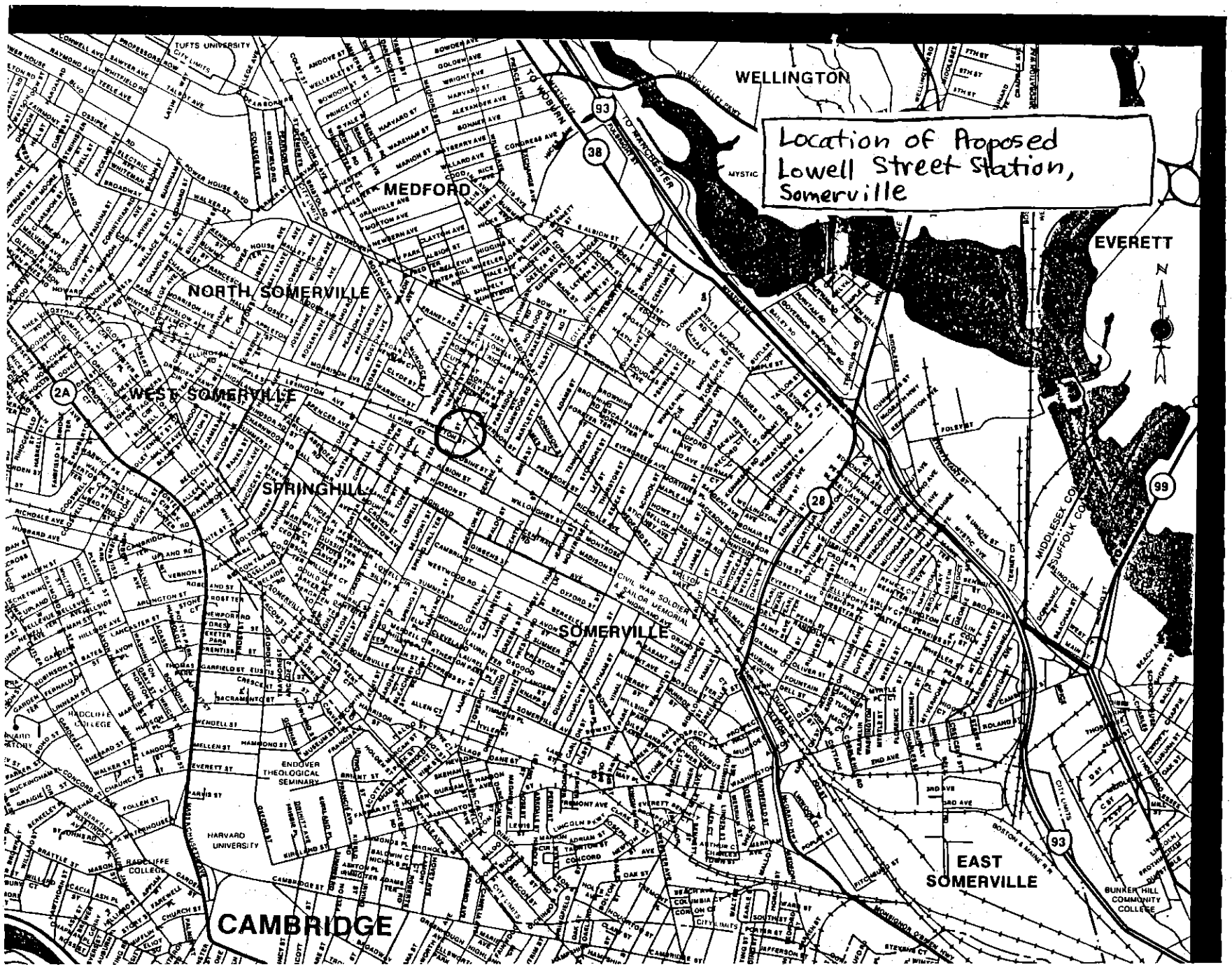
Denise Provost

Denise Provost

cc: Representative Patricia Jehlen
Mayor Michael Capuano
Alderman Joseph Macaluso
Alderman Kenneth Joyce
James Bretta, Director of Housing and Community Development, Somerville
Steven Chait, President, Association for Public Transportation Users

Proposed Lowell Street Station, Somerville, on the Lowell Commuter Rail Line




Location of Proposed
Lowell Street Station,
Somerville
WELLINGTON
EVERETT
MEDFORD
NORTH SOMERVILLE
WEST SOMERVILLE
SPRINGHILL
SOMERVILLE
EAST SOMERVILLE
CAMBRIDGE
TUFTS UNIVERSITY
HARVARD UNIVERSITY
RADCLIFFE COLLEGE
ENDOVER THEOLOGICAL SEMINARY
BUNKER HILL COMMUNITY COLLEGE
MIDDLESEX COUNTY
SUFFOLK COUNTY
MYSTIC
TO WOBURN
TO WORCESTER
CIVIL WAR SOLDIER & SAILOR MEMORIAL
N

Comment #105

ROBERT STURGIS FAIA
5 DOUBLET HILL ROAD WESTON

ARCHITECT
MASSACHUSETTS 02193

(617) 647-7833
FAX (617) 647-9260

3 March 1992

Mr. Robert Sloane
Executive Office of Transportation and Construction
10 Park Plaza
Boston, MA 02116

Dear Bob:

For some reason, last Thursday's meeting didn't get on the right place in my calendar, but I have been reading the material and it is all good.

I received it a bit late via the B.S.A. It would be better to send future mailings to me direct at the above address. A few things:

1. Enclosed is the BSA Regional Design Committee's "manifesto" or position paper, first edition. Note the Transportation / Communication section. I hope you will find it compatible with your direction. (I stole one of your maps for the last page!) It will be the basis for comments on and/or support of the State's proposals. (Although it appears that not all of the State's proposals come out of the same office; viz. my recent letter in the Globe.)

2. The national A.I.A. is proud of its part in the passage of the recent transportation bill. I am somewhat connected into that scene, also.

3. The BSA Regional Design Committee expects to give more detailed attention to transportation-communication matters this year, and to sponsor a panel workshop on the subject at the Build Boston 92 convention next November 18 - 20, probably Thursday afternoon, the 19th. Can I sign you up now?

Sincerely,

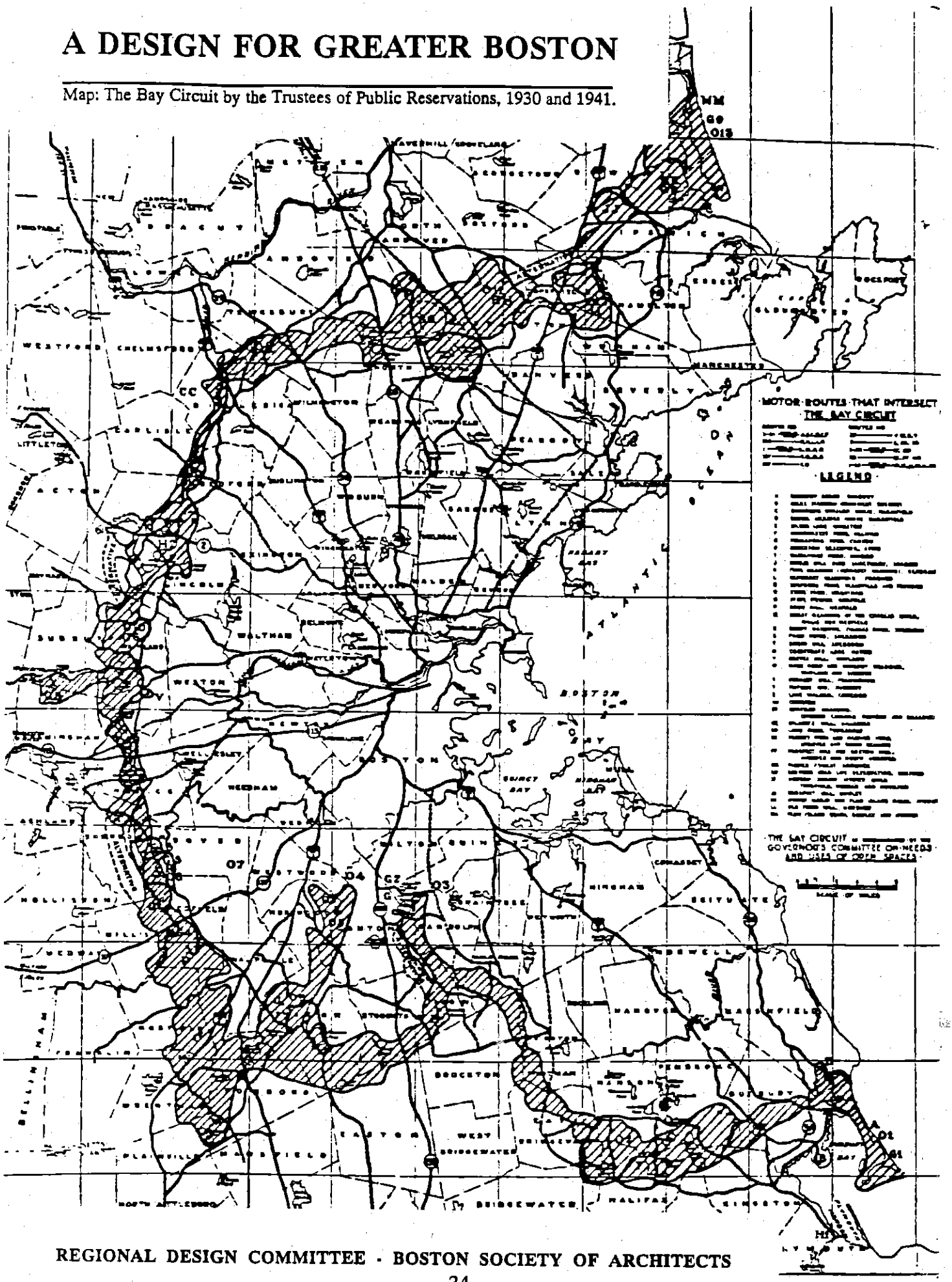
Bob

Robert S. Sturgis

enclosure

A DESIGN FOR GREATER BOSTON

Map: The Bay Circuit by the Trustees of Public Reservations, 1930 and 1941.



REGIONAL DESIGN COMMITTEE · BOSTON SOCIETY OF ARCHITECTS

1 January 1992

This is the first edition of a position paper of the Regional Design Committee / BSA.

It identifies what we believe are the basic issues for the landscape of Eastern Massachusetts and our use of it. We have gone on to recommend policies for dealing with inevitable growth and change while holding fast to the natural and historical assets that have given the Boston area its distinctive character.

Ideas and comments for a second edition will be welcomed and appreciated.

Robert S. Sturgis, chair
5 Doublet Hill Road
Weston, Massachusetts 02193

telephone: (617) 647-7833

The New England Character

"...I love thy rocks and rills
Thy woods and templed hills..."

The image of the New England countryside, focused on town greens, with their grass and elm trees, each surrounded by its white steepled church, its general store and handsome houses, is still on the minds of those who move away from the city of Boston and of those who move here from other parts of the country.

Many want to believe that we can live in one of those fine homes, with like-minded and friendly neighbors, with a place for children to play safely, with life's necessities close at hand, and with participation in the affairs of the town.

Also, we imagine that just outside of this warm and comfortable group of homes and activities around the town center, there are large fields and farms supporting the town, beyond which are forests and hills, and beyond them the next towns.

But today many of the older centers are no longer central to community life, houses are scattered over the former fields, the roads between towns are continuous commercial strips, and the fields and woods are shrinking.

We have moved from the farms to Boston, the business and trading center. Still, the image and the dream of the "rural ideal" stays with us, but very few of us in New England can live it. Some of us prefer not to, but why can't we, if we choose?

Freedom Achieved

" ... From every mountainside,
Let freedom ring."

The confident hope expressed in the hymn America, written as this country was entering its period of dramatic growth, has been achieved. Many have achieved most of the freedom we asked for.

Many indeed have been freed from the hardscrabble life of the New England farmer (although not from other hardships). We are offered the worldly goods that mass production and a consumer-oriented industry can provide. We have been free to move to the West, if we want, or to move to the city from the farm, or to move away from the city to the new suburbs, -- if we want.

The personal automobile has become the ultimate vehicle for this freedom and choice. It takes us wherever we want to go, when we want to go, and in a personal environment of our own choosing.

But is what we see really what we asked for? Most of the New England landscape today -- like the rest of the American landscape -- bears little resemblance to the ideal of the New England village. What are the qualities we seek, and can our modern way of life provide them?

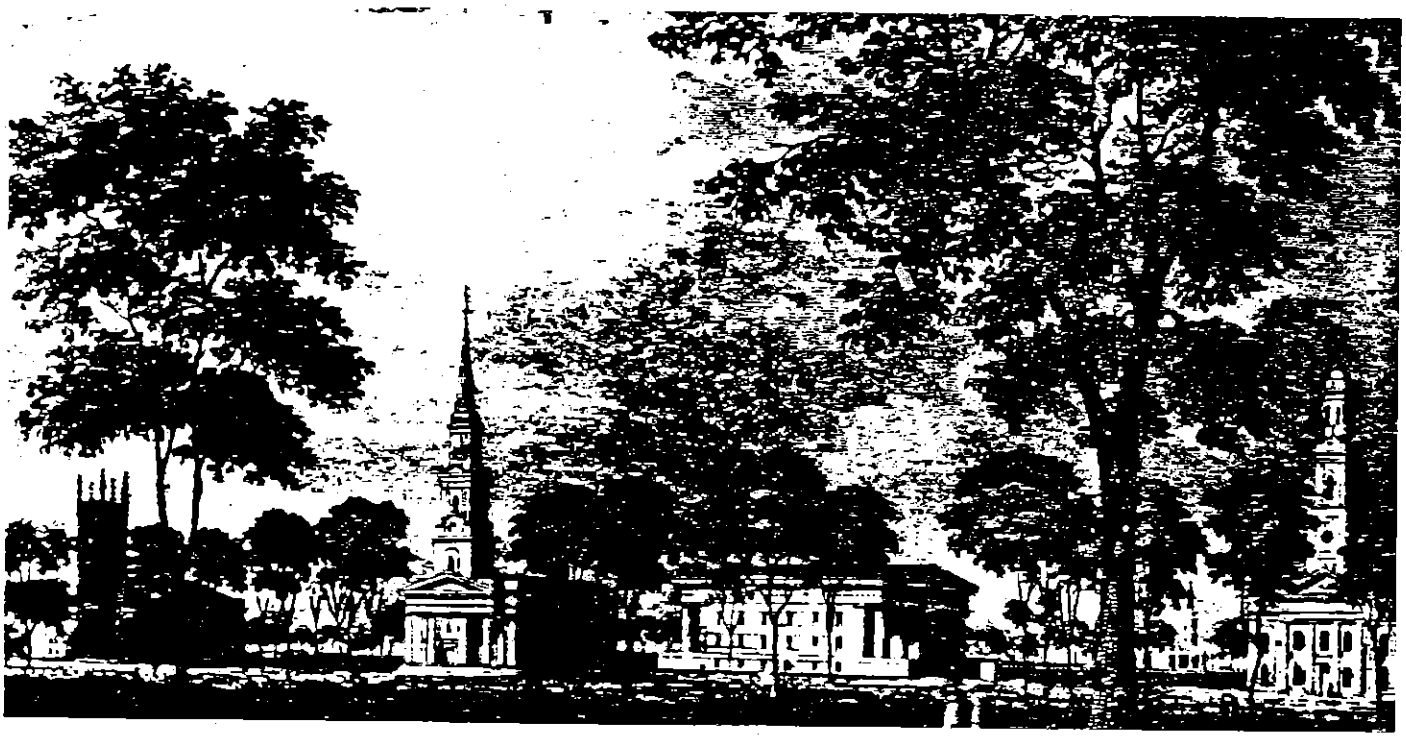
We depend on the businesses and institutions of Boston for much that we live for, though some do not believe it and others wish it were not so. Nevertheless, everyone is entitled to a choice of where and how to live and the countryside still beckons.

"...Long may our land be bright
With freedom's holy light,..."

Freedom for what?

Some very basic things:

- To express one's individuality and family identity by having one's own piece of ground, with space and privacy.
- Personal mobility for choice of location, work and friends.
- The opportunity to do worthwhile work for decent pay in a congenial setting.
- Good schools and safe play areas for children.
- An accessible town or village center with a sense of place.
- Open space for relaxation and children's play.
- A healthy natural environment, including clean air and water
- Control over one's own life and surroundings.



The somewhat tarnished dream.

- Some have been lucky to find individuality and privacy within the region, with a choice of environment, good schools and friendly neighbors, whether in the city or the suburban areas.

- But many have had to settle for much less, especially in some of neighborhoods closest to the center..

- The strip commercial development -- the suburban "main street" -- whatever its advantages -- is a frenetic experience, lacking the visual pleasures and chances for neighborly contact associated with more urban settings, much less those of the older villages.

- Shopping malls, amid acres of black-topped parking, are hardly better, and weaken the traditional centers which we have valued.

- In the suburbs what was once affordable, with government help, has given the original owners a chance at the American Dream (with a satisfying appreciation in value), but for the new generation, without such help, the dream of home ownership is elusive.

- Personal mobility now has a high price. A family needs two cars, not just one. Some employment opportunities are available only if one is willing to drive 40 miles each way and to sacrifice two or more hours of commuting time.

- Suburban communities tend to be socially or economically compatible but unbalanced in their isolation. Freedom of choice and housing opportunities for others remain a matter of regional concern.

- Open space, an original attraction of the countryside, whether in the form of water bodies, woods or farmland, is disappearing and becoming less accessible.

Towards a new dream

THE CENTER

Wherever in the Boston region we prefer to live, we cannot do without its center -- the business district, the universities, the hospitals, the athletic events, the cultural events, and the activities connected with all of them.

Around this regional center are the inner suburbs -- like Winthrop, Everett, Cambridge, Brookline, Roxbury and South Boston. They are all part of where people choose to live in the Boston region.

But when a city grows and becomes more crowded, some will move farther from the center, whether for economic, environmental or social reasons. Others will stay at the heart of the region, some by personal preference and others by necessity, especially those businesses and governmental activities which depend on daily face-to-face contacts.

Other businesses, like manufacturing, distribution, retailing, district and branch offices of commerce and government will follow the population outward, requiring extensions of roads, public transportation, water, sewer, public utilities and other essentials of a public infrastructure such as schools, libraries and hospitals.

Two-thirds of all new growth, in the Boston region as well as in the rest of the country, happens outside of the center city.

A PROGRAM FOR THE BOSTON REGION

GROWTH AND CHANGE

- Encourage regional thinking by the public and public agencies as a basis for more efficient use of land.

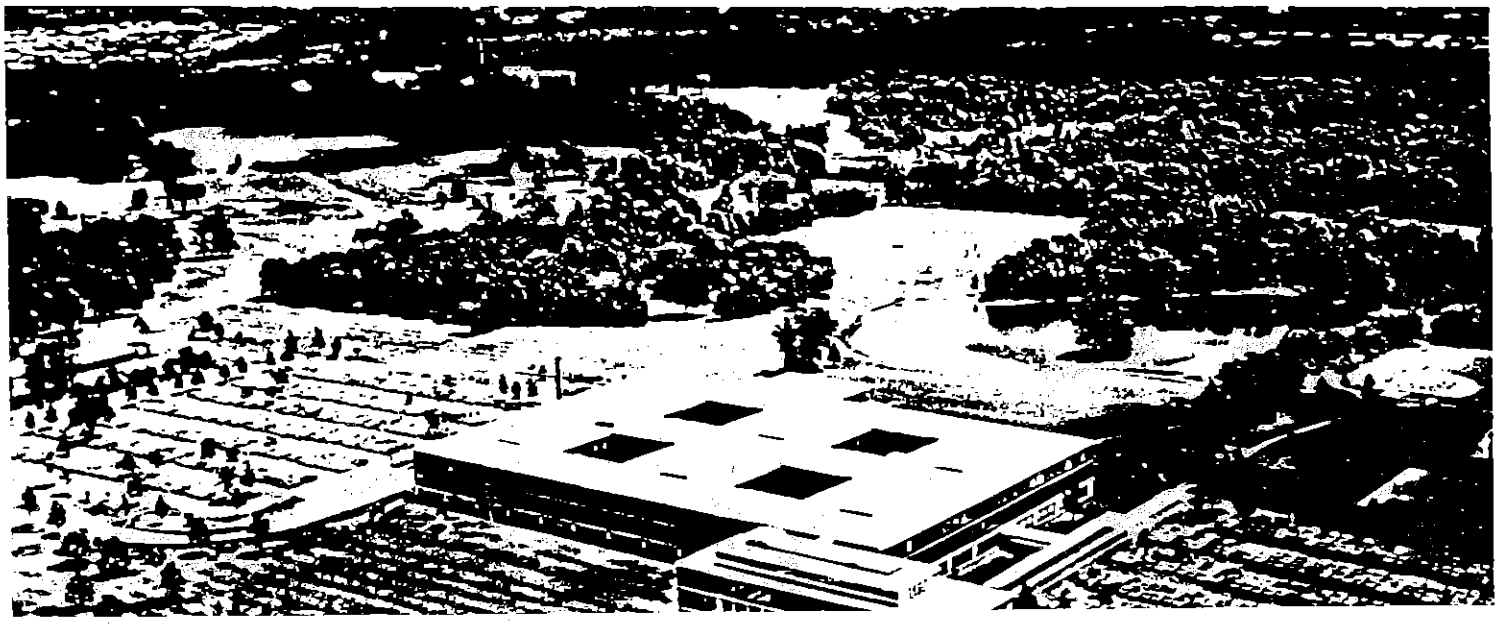
- Plan regional patterns for a minimum consumption of non-renewable resources, a minimum use of energy; and a maximum of local self-sufficiency, so as to accommodate growth with a sustainable quality of life.

- Bring houses closer together and closer to town or village centers to make walking easier and cars less necessary.

- Reinforce diversity and vitality in existing town centers with incentives for the use of older buildings and districts to enhance a sense of community.

- Preserve the character of scenic roads and paths, including distinctive views as well as stone walls, trees, bridges and other landscape characteristics.

- Promote actions to resolve land disputes between municipalities at their boundaries.



HOUSING

- Establish comprehensive regional policies and plans, with sub-regional and local plans, for adequate housing affordable for everyone.

- Promote energy efficiency both in the design and construction of houses and apartments and in their proximity to work and other daily activities.

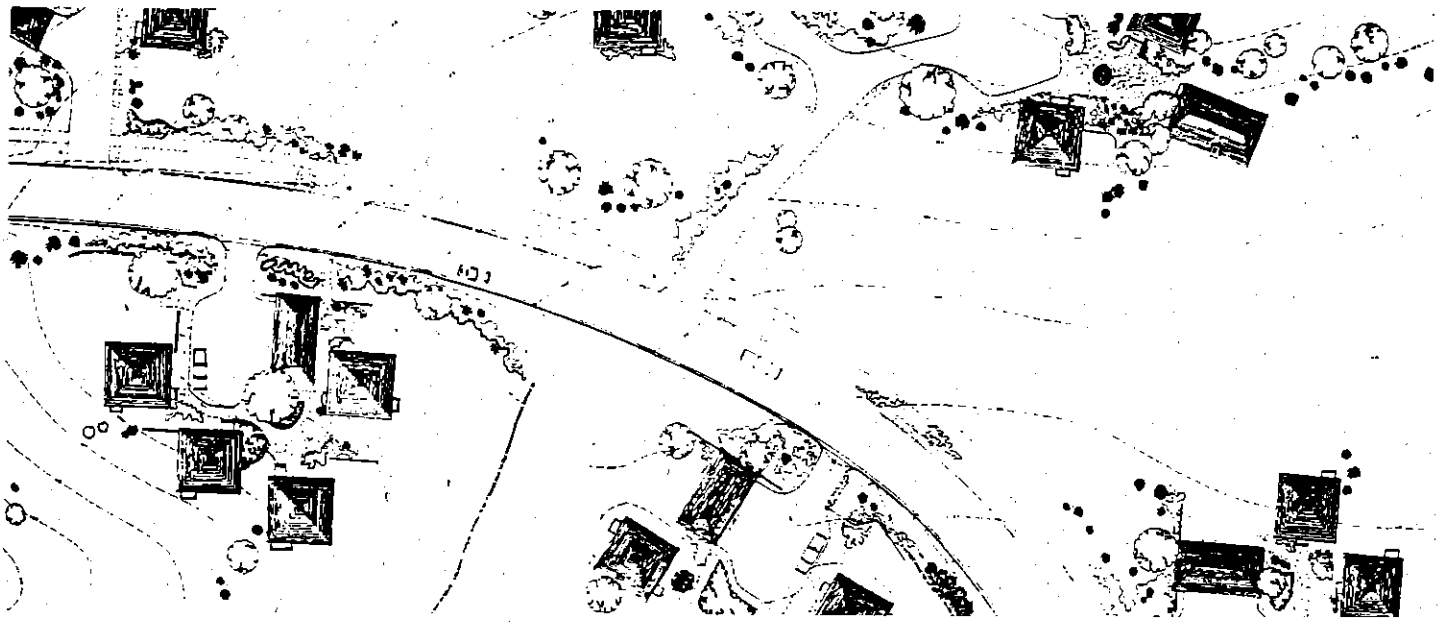
- Encourage housing in and near village and neighborhood centers, with convenient access to daily necessities and transportation.

- Reinforce a sense of community in each town and neighborhood by ensuring that there is adequate housing, both rented and owned, for teachers and other town employees, tradespeople, elderly long-time residents and young adults.

- Provide within each community a range of housing types, from detached houses to in-law apartments to multifamily dwellings so that nobody will be forced to leave the community where they have established roots.

- Promote actions to make these objectives possible, including changes to zoning, subdivision and enabling legislation.

- Make use, with adequate funding, of existing state and national programs to ensure that all are adequately housed. Amend or establish new programs and funding as the needs are identified.



WORK AND BUSINESS

- Encourage and maintain a range of industries and businesses throughout all parts of the region, both to provide employment opportunities and to serve community needs.

- Encourage greater participation by the private sector in the upgrade of transportation and utility service and infrastructure.

- Create more flexible work and shopping environments, responsive and supportive of current family lifestyles, and including day care, health clinics and teenage centers..

- Provide for an appropriate range of community activities within walking distances, including convenience shopping, post office, town office, library, churches and meeting places.

- Provide public and/or private transportation from major residential areas to larger automobile oriented retail centers.

- Provide zoning, and other incentives if needed, for work places at transportation nodes, especially those served by public transportation.

- Establish local, state and federal design guidelines and regulations for commercial development on state and federal roads, including landscaping, site design and signage.

- Encourage the sharing of resources across community boundaries to eliminate wasteful duplication of services.

OPEN SPACE

Types of open space range from the wildness of swamps, forests and seashores to highway medians, public parks and urban plazas. Open space benefits are both tangible and intangible.

Tangible benefits of open space can be measured in productive woods and fields, maintenance of water supplies, wildlife preservation, flood protection and scenic attractions.

Intangible benefits are measured in the character and satisfaction of the community, its sense of history, place and purpose.

To achieve a balance between natural areas, cultivated open space and the human desire to live in these same areas, public education and action is needed.

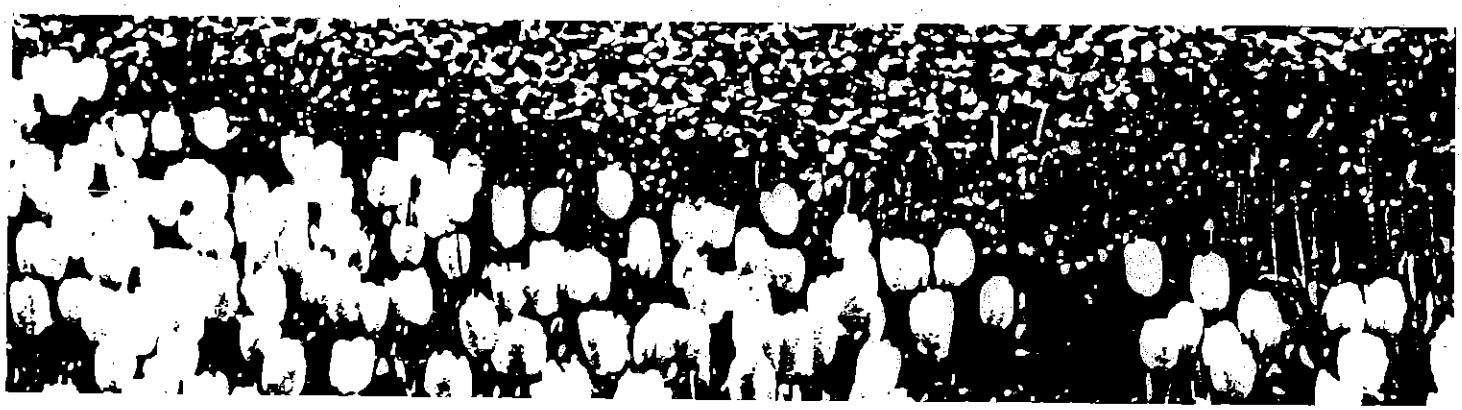
- Create public awareness of the need for government to initiate, implement and fund permanent programs for open space protection.

- Develop state and regional plans for the acquisition of open space, both for conservation and for public enjoyment.

- Protect all existing farm land for continuing production, reinforcing and extending existing state and federal programs..

- Protect the ecological integrity of the watersheds of lakes, rivers and shore zones, allowing no net loss of wetlands.

- Support programs for open space of regional significance, including hilltops, rivers, seashores, the Bay Circuit, and the Boston Harbor Islands.



- Maintain or re-create an open space focus for central areas, whether at a waterfront, town green, railroad depot or modern equivalent.

- Recognize the value of open space associated with transportation corridors for active public use as well as for buffers, accents and scenic views.

- Review and revise zoning and subdivision laws to require consideration of conservation and other environmental laws.

- Look for national, state and private funds for open space acquisition and maintenance, including the use of land transfer taxes.

TRANSPORTATION AND COMMUNICATION

Transportation includes the physical movement of people and goods, while communication includes the electronic movement of ideas and information. For some purposes, one can be substituted for the other.

Physical movement includes interstate highways and water systems, railroads and airways, subways and high-rise elevators, pipelines and sewer systems. Electronic movement includes conveying electrical energy by transmission lines and radio waves.

Physical transportation provides access within and between cities and their surroundings, both serving and generating growth in the outlying areas. Electronic communications can be independent of location..

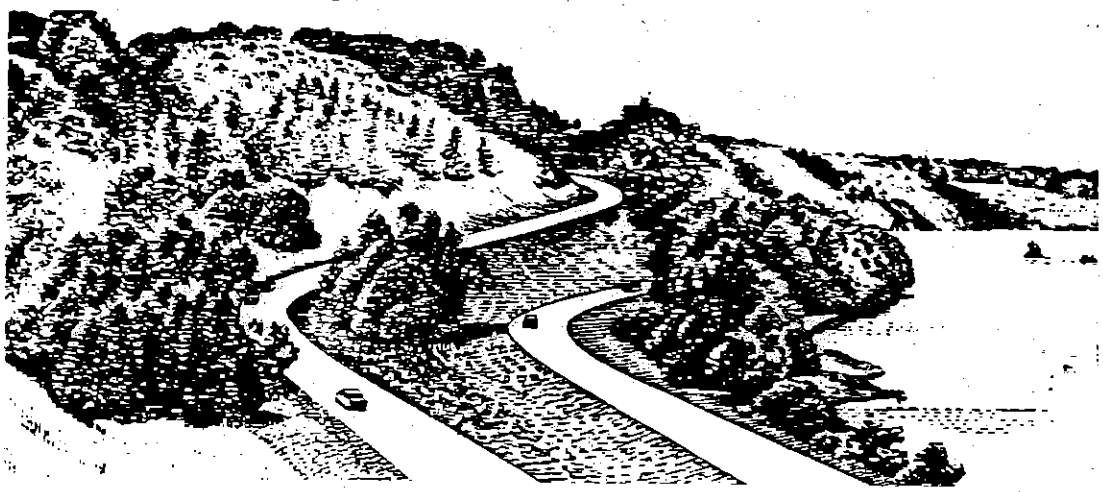
- Design for people -- clear directions, comfortable vehicles, scenic pathways -- in all transportation systems.

- Locate homes, work places and community centers so that trips between them are economical of space, time, equipment and energy.

- Use transportation modes, public and private, effectively managed, which will provide the greatest capacity, use the least energy and serve the most destinations for given conditions.

- Protect people, especially in residential areas, from excessive noise and noxious fumes, whether from aircraft, rail or highway vehicles.

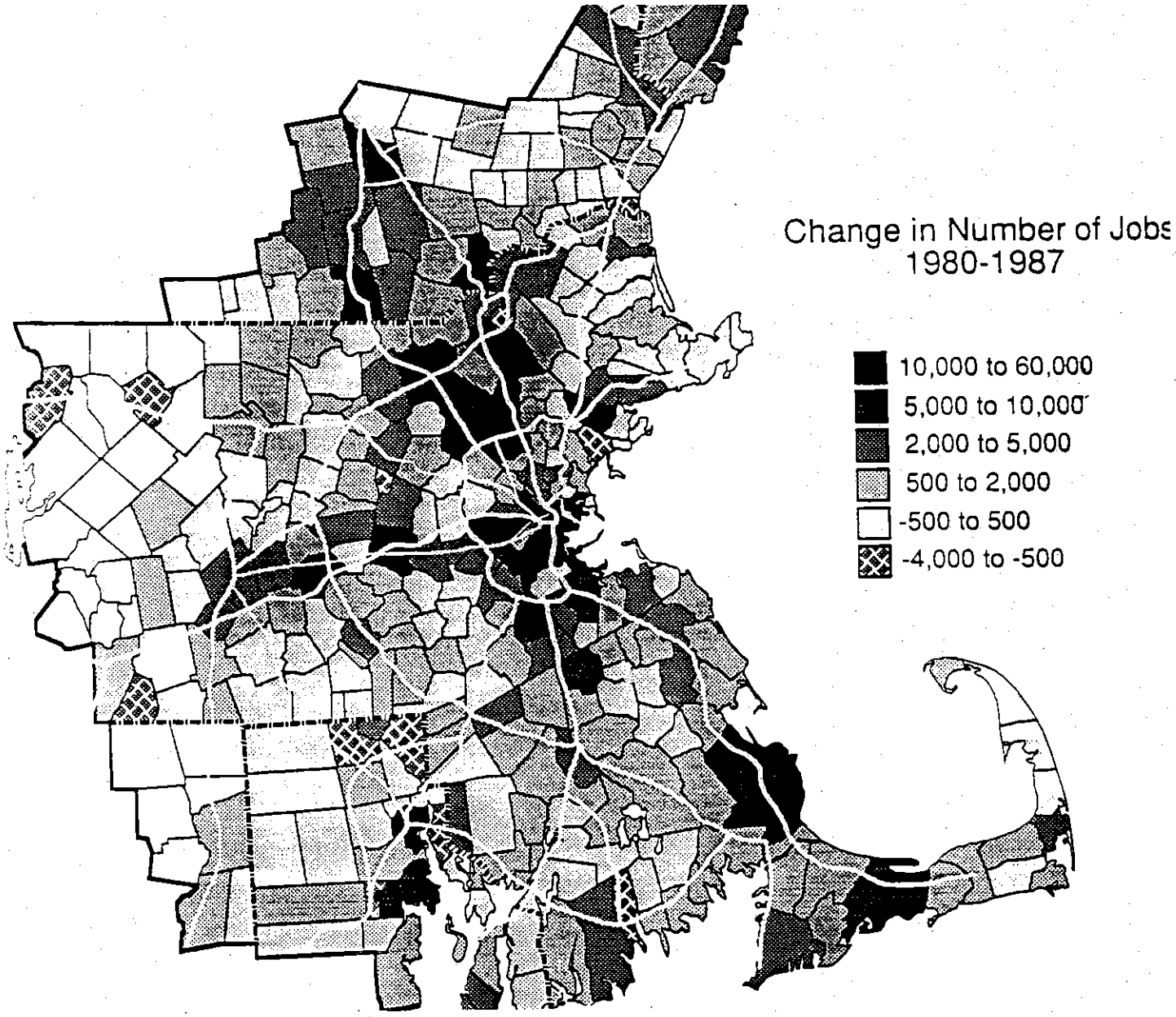
- Preserve and extend all existing rail lines and other transportation corridors and rights of way for transportation uses.



- Plan for and provide special lanes and spaces in existing major corridors for high occupancy vehicles and new modal interchanges so as to accommodate current demand and future growth.

- Extend the reach and increase the capacities of public transportation as population densities increase, using existing circumferential rights of way to connect radial lines to each other with vehicles and modes of appropriate capacity.

- Provide for inter-city and international transportation, including access to air travel, both cargo and passenger.



KENDALL
HEALTHCARE PRODUCTS COMPANY

Mark W. Keigwin
Distribution Planning Analyst
Distribution Services

15 Hampshire Street • Mansfield, MA 02048
(508) 261-8328

Ms. Sonia W. Hamel
Program for Mass Transit
Deputy MPO Executive Secretary - CTPS
State Transportation Building
Suite 2150
10 Park Plaza
Boston, MA 02116-3968

Dear Ms. Hamel,

As a resident of Boston for 6 years, I am pleased to find out that CTPS is interested in hearing comments about transportation issues from the residents of the city. I hope that you find my opinions favorable.

Particularly, I am concerned with the inactivity surrounding the Southwest Corridor Project. Upon the announcement of the Orange Line replacement service in the early 1970's, it was stated that the residents surrounding Washington St. would receive "equal to or better than" service than they were currently getting from the El. This was to occur in conjunction with the tearing down of the El, so as to not interrupt service along Washington St. However, almost 6 years after the project's completion, Washington St. has still not been granted its promise. The only acceptable solution to this problem is the construction of an additional Green Line LRV along Washington St.

Another disturbing issue has been the lack of activity surrounding the Central Artery/Third Harbor Tunnel Project. Included in this project should be a rail line connecting North and South Station. This project opens up a chance of a lifetime to extend Amtrak lines as well as MBTA lines into northern Massachusetts and Maine. This would bode well for the recent renovation of South Station and Boston would once again become a rail hub for New England. Possibilities (including high speed rail) for this project, both economically and environmentally, are endless!

I hope that you find these observations constructive, and are able to implement some of these basic ideas. I look forward to the future of metropolitan Boston mass transit projects, and I thank you for allowing this opportunity to express my opinions.

Sincerely,

Mark Keigwin

Mark Keigwin

A Note Regarding Comment #107

The items constituting Comment #107 were submitted by the Metropolitan Area Planning Council (MAPC) on behalf of the following subregional groups:

- South Shore Coalition
- Inner Core
- North Shore Transportation Task Force
- MetroWest Growth Management Committee
- Minuteman Advisory Group on Interlocal Coordination (MAGIC)
- Southwest Advisory Planning Committee (SWAP)

The items reflect the transportation priorities of these groups. Subregional prioritization of transportation projects is an ongoing effort on the part of MAPC performed in consultation with the Massachusetts Bay Transportation Authority and the Massachusetts Highway Department.

Comment #107

South Shore Coalition

Town Hall, 345 Main St., P.O. Box 122, Norwell, MA 02061 (617) 659-4909

May 17, 1991

David C. Soule
Executive Director
Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Dear David:

This is to inform you that last evening the Coalition, based on the recommendations of its Transportation Task Force, voted to endorse as regional priorities the following projects listed in the TIP. They appear in order of priority.

The rehabilitation of the Old Colony Railroad;
The Route 53 Hanover project -- #114500;
The Route 53 Hingham/Norwell project -- #114820;
The Route 139 Marshfield/Pembroke project - #114505

The Coalition also voted to request that the MDPW expand their Route 3 add-a-lane project (#109101) to include a study of the capacity of the Route 3 access ramps at Route 228, 53 and 139.

The Coalition was concerned to learn this week, that the timetable for the start up of the Old Colony Railroad will be delayed by at least a year. We feel that such a delay is not in the best interest of the project and we hope that through additional staff effort this can be avoided. We ask that you convey our concerns about this matter to the appropriate authorities.

We appreciate the opportunity to comment on the TIP.

Sincerely,

Bob Ferguson

Bob Ferguson
Chairman, SSC

BF/JC/lab
(Southsho/TIP)

[Comment #107, cont.]

Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts 02111 617/451-2770

MAPC

serving 101 cities and towns in metropolitan Boston

13 May 1991

TO: TRANSPORTATION POLICY COMMITTEE
RICHARD EASLER, CHAIR
FR: INNER CORE SUBREGION
RE: SUBREGIONAL REVIEW OF TIP AMENDMENTS

On May 7, 1991 members from the Inner Core Subregion met to develop a unified review of the TIP.

The Subregion seeks your endorsement of their findings, asks that you forward the list below to the Executive Committee for their approval and endorsement, and that the MAPC Transportation Group include the Subregion's list along with their review to CTPS as part of MAPC's comments on the TIP.

Inner Core Subregion's Response to the TIP

Request for Action on Last Year's Priorities.

Members asked why the priorities the core subregion had established last year had not been recognized in this year's annual element of the TIP.

Members of the subregion reiterated their desire to see the following projects in the TIP:

1. Route 2 Bridge
   Core members would like to see the design of this project completed and funds for its reconstruction dedicated. The reconstruction of the bridge should remain separated from the rest of the Alewife area redesign process.

2. Corridor Study for Somerville/Medford Area
   Somerville and Medford continue to request a complete study be added to the annual element, that funds be allocated and the study expedited so short term mitigation measures can be done before construction on the Central Artery begins.

Franklin G. Ching, *President* Marjorie A. Davis, *Vice-President* Martha K. Gjesteby, *Secretary* Jay J. Donovan, *Treasurer*

Somerville and Medford reiterated the urgency of this project, given the existing traffic problems in the corridor and the expected added burden from CA construction.

3. Circumferential Transit
In the TIP, $1 million for preliminary design is dedicated to the circumferential transit line in the annual element. The Core members are unclear about which route has been chosen. They continue to seek the release of the studies determining the route if they have been completed.

The Core members recommend again that funds set aside for the project in the annual element be used to complete the studies if necessary and move the project forward in this fiscal year.

4. Transit Extension to Route 128
Core members again recommend that a systematic study/update for all T line extensions (red, orange, blue and green) be completed, the effectiveness and costs of extensions be compared, and priorities for construction set. The study of all line extensions should be added to the annual element and funded this year.

5. Park and Ride Program
No study of the feasibility of dedicating spaces for multi-occupancy vehicles in commuter lots/garages was added to the annual element in the draft TIP. However, correspondence between David Soule and Mr. Glynn and Mr. Steward at the MBTA discussed the possibility of the MAPC working with the MBTA on developing a scope of work for such a study. The MBTA has not yet followed up on this offer.

Core members again requested this addition to the annual element of the TIP and funding for the study dedicated. They want to see provisions for a differentiated fee structure examined in the study as an incentive to commuters participating in ride sharing.

New Projects

1. Minuteman Bikeway, Somerville
Mary Jo Bohart, Somerville, asked that the Minuteman Bikeway extension along the RR right of way in Somerville, approved by DPW in 1988, be put into the TIP. Alan McClennen, Arlington, commented that the Somerville project had been approved but not designed. He suggested Somerville check with DPW/DEM and get an addendum to the consultant's contract for the design.

2. Medford Square
Medford is seeking urban systems funding for the downtown redevelopment. The first phase of the plan calls for creating a one-way street and on-street parking where a pedestrian mall now stands. Buses will be accommodated, a bus shelter constructed in a new location, and other traffic improvements made. Phase I costs are estimated at $600,000.

Members of the core subregion discussed the plan and voted unanimously to give their general endorsement for Phase 1 of the Medford Square Improvement Study. They recommended that it be placed in the 2-5 year element of the TIP, as plans and specifications had not been done yet.

[Comment #107, cont.]

Metropolitan Area Planning Council

110 Tremont Street Boston, Massachusetts 02108 (617)-451-2770

Serving 101 Cities & Towns in Metropolitan Boston

September 20, 1988

Ms. Jane Garvey, Commissioner
Massachusetts Department of Public Works
10 Park Plaza
Boston, MA 02116

Dear Commissioner Garvey:

The North Shore Transportation Task Force would like to thank you for supporting our effort to prioritize transportation needs in the North Shore of the Metropolitan Area Planning Council's region. Through the support of your office, MAPC, MDPW District 5 and the Executive Office of Transportation and Construction, the Task Force is nearing completion of our effort to establish priorities.

Task Force members are bringing the attached draft of the Final Report of the North Shore Transportation Task Force: Description of Regional Issues and Priorities to their local governing bodies for endorsement of the priorities set by the Task Force. The Task Force, at its September 7, 1988 meeting, decided to forward this draft to your office as a progress report and to provide you with an indication of the priorities for the North Shore.

The North Shore Transportation Task Force anticipates completing the prioritization of transportation needs in the near future. The final endorsed document will then be forwarded to your office.

Sincerely,

Marjorie A. Davis

Marjorie Davis
Chairperson, North Shore Transportation Task Force

MD/DF/mlm
cc: David Charette, MDPW District 5
Peg Gromko, CEPO
David C. Soule, MAPC Executive Director
Carol Blair, MAPC Transportation Group Manager
Daniel Fortier, MAPC Principal Transportation Planner
Matt Currie, MDPW

Transp. .
(Garvey)

Frank E. Baxter, *President* Franklin G. Ching, *Vice-President* Marjorie A. Davis, *Secretary* Martha K. Gjesteby, *Treasurer*

Executive Director: David C. Soule

Table 1
TOP REGIONAL PROJECTS
(for all funding categories)

1. Route 1 Jughandle, Peabody
1. Beverly Salem Bridge and Bypass Road, Beverly and Salem
3. Route 128/Trask Lane Interchange, Danvers and Beverly
4. Route 114 South of Route 128 through Riley Plaza, Peabody and Salem
4. Lowell Street/Route 1 Interchange, Peabody
4. Route 128 from Forest Street to Brimball Avenue, Peabody, Danvers and Peabody
7. Route 128 at Eastern and Bass Avenues, Gloucester
7. Route 128/Endicott Street Interchange, Danvers
9. Danvers Road R.R. Bridge, Swampscott
9. High Street Reconstruction, Danvers

Table 2
BRIDGE REPLACEMENT
(for bridge replacement funding)

1. Beverly Salem Bridge, Beverly and Salem
2. Congress Street Bridge, Salem
3. Danvers Road R.R. Bridge, Swampscott
3. Andover Street R.R. Bridge, Peabody
5. Essex Street R.R. Bridge, Swampscott
6. Legg's Hill Road Bridge, Salem
7. Ocean Avenue R.R. Bridge, Salem

Table 3
FEDERAL AID PRIMARY
(primary state system, statewide competition for funds)

1. Route 1 Jughandle, Peabody
1. Beverly Salem Bridge Bypass Road, Beverly and Salem
3. Route 128/Trask Lane Interchange, Danvers and Beverly
4. Route 114 South of Route 128 through Riley Plaza, Peabody and Salem*
4. Lowell Street/Route 1 Interchange, Peabody
4. Route 128 Improvements from Forest Street to Brimball Avenue, Peabody, Danvers and Beverly
7. Route 128/Endicott Street Interchange, Danvers
8. Route 128/Lowell Street Interchange, Peabody
9. Route 128/Sohier Road Northbound Ramps, Beverly
10. Route 114 and Sylvan Street intersection, Peabody

* Riley Plaza portion is an Urban System Project

Table 4
FEDERAL AID URBAN SYSTEMS
(Important community road system, Metropolitan Boston competition for funds)

1. Riley Plaza, Salem
1. Route 128 at Eastern and Bass Avenues, Gloucester
3. High Street Reconstruction, Danvers
4. Cabot Street and Conant Street intersection, Beverly
5. Cabot Street at Rantoul, Front and Water Streets, Beverly
5. Lowell Street and Russell Goodale Street intersection, Peabody
7. Loring Street, Jefferson Street and Canal Street intersections - Salem
8. Brimball Avenue and Dunham Road intersection, Beverly
8. Route 114 and Route 62 intersection, Middleton
8. Highland Avenue and Swampscott Road, Salem
8. Route 114 and River Street Middleton

DF/mlm
North Shore
(N.S. Transportation Priorities)

Growth Management Committee
13 East Central Street
Natick, MA 01760
508·651·7350

June 25, 1990

Mr. David Soule, Executive Secretary
Metropolitan Area Planning Council
60 Temple Place
Boston, MA 02111

Dear David,

The MetroWest Growth Management Committee has identified ten transportation projects from the 1989-93 Transportation Improvement Program (TIP) as top regional priorities. These projects were selected as MetroWest's priorities for the area based on a year-long process that relied on safety concerns, congestion and perceived regional need or urgency. Boards of Selectmen, Planning Boards and City Council have unanimously endorsed the list. MetroWest, in conjunction with the Metropolitan Area Planning Council, submit the locally endorsed list of priorities to the funding agencies and strongly recommend that these projects receive prompt attention.

The projects in the list are categorized as being of the HIGHEST, HIGHER or HIGH priority, but are not listed in order of preference within these categories.

HIGHEST PRIORITY

Route 30/Speen Street; MDPW id: 086449 Reconstruction of Route 30, Cochituate Road, from westbound exit I-90 - railroad overpass, including Speen Street intersection, Framingham/ Natick. Urban Systems, Future Element, 0 design, volume=32,189, LOS=F, delay>60 secs., annual average accidents=?, MetroWest Transportation Policies: #1,2,3,4 (please refer to enclosure).

This intersection is of the utmost importance within the regional transportation network. Located at one of the points of the Golden Triangle area in Framingham/Natick, it is in close proximity to the Massachusetts Turnpike (Exit 13), and to one of the preferred location alternatives for the Logan Express relocation and the proposed Transportation Center. Reconstruction of the intersection is proposed as part of the joint land use/transportation plan for the Golden Triangle. Intersection improvements would enhance the potential for public transit in the area and reduce diversion of trips to local streets.

Route 20/Nobscot Road and Union Avenue; MDPW id: 100800 The project as described in the 1989-93 TIP is no longer supported by Sudbury or MetroWest, but alternative improvements have been proposed by Sudbury to address the same deficiencies. MetroWest supports Sudbury's alternative project and requests that this item be amended to reflect Sudbury's new design.

Proposed change in project description:
Route 20 from Hop Brook to the Marlborough Town Line Traffic improvements to Route 20 - Reconstruction of Route 20, signals and construction of a Nobscot Road to Union Avenue by-pass; Sudbury. Consolidated Primary, Reconstruction, 2-5 Year Element, 0% designed, volume=22,400, LOS=F, delay=?, annual average accidents=78.00, $2,000,000, MetroWest Transportation Policies: #2.

This project addresses deficiencies in two major areas, Route 20 being a principle arterial for east-west traffic, and Nobscot Road-Union Avenue serving north-south traffic. The latter two roads are offset, thus forcing north-south traffic to use the portion of Route 20 located between them, and introducing a considerable amount of left turns. The improvements are consistent with long range land use plans for this portion of Route 20 in Sudbury.

Route 30/Firmin Avenue, Central Street and Framingham Road/White Bagley Road Was included in 1989 TIP Draft as MDPW id: 086452, but is not listed in the final 1989-93 TIP. Southborough is actively requesting that this set of intersections be included in the TIP. Was State-funded reconstruction to modify existing interchange between Rts. 9 & 30, Framingham and Southborough, Reconstruction.

Additional information submitted by Southborough:

- Route 30/Framingham Road and White Bagley Road: Project #027007, Urban Systems, Reconstruction, Annual Element, 5% designed, volume=20,000*, LOS=F*, delay>60 secs., $200,000, annual average accidents=6.

- Route 30/Firmin Avenue-Valley Road: Project #026851, Urban Systems, Reconstruction, 2-5 Year Element, 5% designed (study), volume=18,400*, LOS=F*, delay>60 secs., $300,000, annual average accidents=10.

- Route 30/Central Street: Project #027007, Urban Systems, Reconstruction, Annual Element, 5% designed, volume=21,000*, LOS=F*, delay>60 secs., $150,000, annual average accidents=5.

* Level of Service and daily volume based on existing 1989 conditions and do not include projected buildout of proposed 9/90 Crossing project in Framingham. Design studies are

presently underway by Edwards & Kelsey for MDPW. MetroWest Transportation Policies: #4.

Route 30 in Southborough serves as a major arterial for traffic from Southborough as well as a north-south link between Westborough, Marlborough and Framingham. The three intersections in question fail under current conditions, and will receive further impacts in the near future from the 9/90 project in Framingham, and within the next decade from projected office park developments in the West Marlborough area.

HIGHER PRIORITY

Route 9/Route 126 Not included in the 1989-93 Edition of the TIP. This is a key intersection in Secretary Salvucci's plan for the Golden Triangle. Bridge reconstruction was locally recommended, and the final design will be largely dependent on the land takings that will be necessary. Secretary Salvucci agreed to proceed with signal synchronization with Route 30/126 as an interim solution.

The Committee feels that this intersection is vital to the regional transportation network, connecting two major arterials running north-south and east-west, forming one point of the Golden Triangle area, and channeling south and west traffic through Route 30 to the Massachusetts Turnpike, and to the general area where the proposed Transportation Center could be located. MetroWest Transportation Policies: #1,2,3,4.

Routes 30/126; MDPW id: 086450 Safety improvements to Route 126, Concord Street, and Route 30, Cochituate Road, Framingham. Consolidated Primary, Reconstruction, Annual Element, 75% designed, volume=?, LOS=F, delay=?, annual average accidents=14.50, cost=?, MetroWest Transportation Policies: #1,2,3,4.

This intersection is adjacent to the Route 9/126 intersection discussed above, and is vital to the regional transportation system for the same reasons.

Route 85/Brigham and Walker Streets Marlborough is actively requesting that this project be included in the TIP.

Additional information submitted by Marlborough:

- Urban Systems, Reconstruction, 25% designed, volume=18,000, LOS=F, delay=80 secs., annual average accidents=28, $500,000., MetroWest Transportation Policies: #2,3,4.

Besides experiencing existing deficiencies, this intersection is expected to receive a considerable amount of cut-through traffic generated by the office park developments proposed for the

western part of Marlborough. Its improvement is recommended in conjunction with long range transportation and land use plans for West Marlborough.

HIGH PRIORITY

Southborough Bridge:

- Route 85 Bridge over Conrail; MDPW id: 123330 Replace bridge #S-20-5 on Route 85, Southborough. Highway Bridge Replacement and Rehabilitation, Annual Element, 75% designed, Bridge Rating=6, annual average accidents=8.50.

Wellesley Bridges:

- Weston Road Bridge over Conrail; MDPW id: 141630 Reconstruct bridge #W-13-10 on Weston Road, Wellesley. Highway Bridge Replacement and Rehabilitation, Annual Element, 0 design, Bridge Rating=2, annual average accidents=15.00.

- Kingsbury Street Bridge over Conrail; MDPW id: 036500 Bridge #W-13-8 on Kingsbury Street, Wellesley. Highway Bridge Replacement and Rehabilitation, Annual Element, 0 design, Bridge Rating=2, annual average accidents=16.67.

Natick Bridges:

- Walnut Street Bridge over Conrail; MDPW id: 137315 Reconstruct bridge #N-03-05 on Walnut Street, Natick. Highway Bridge Replacement and Rehabilitation, Annual Element, 0 design, Bridge Rating=11, annual average accidents=12.00.

- Marion Street Bridge over MBTA and Conrail; MDPW id: 043440 Reconstruct bridge #N-3-3 on Marion Street, Natick. Highway Bridge Replacement and Rehabilitation, 2-5 Year Element, 50% designed, Bridge Rating=20, annual average accidents=?.

These five bridge projects assure safe convenient access over Conrail. They are essential maintenance projects which will not alter highway capacity.

The Committee felt that two other bridges merit prompt attention from EOTC, MDPW and MAPC. These are the Howe Street Bridge, in Ashland, and Sherman's Bridge in Sudbury/Wayland. Their need is addressed in separate letters (see enclosures).

Marlborough Parking Garage; MDPW id: 043505 New construction at the corner of Newton and Granger Blvd. and between Florence and Bolton. State-funded, 75% designed, ENF prepared, $4,900,000,

MetroWest Transportation Policies: #2,5.

This project is vital to Marlborough's downtown revitalization efforts as well as to relieve congestion caused by parking shortage surrounding the city's central business district.

The Committee anticipates that this Transportation Improvement Program prioritization process will serve as a mechanism to confirm the subregion's highest concerns on a yearly basis. MetroWest and its member communities are confident that you will do your part to expedite the funding and completion of the projects included in the list. Thank you for your continued cooperation throughout the process.

Yours truly,

Iryna Priester AC

Iryna W. Priester
Chairman

IWP/RPD/ac

cc: Fred Salvucci, Secretary, EOTC
Jane Garvey, Commissioner, MDPW
MetroWest Growth Management Committee
MetroWest Transportation Task Force
Representative Joseph Connolly
Representative Robert A. Durand
Representative Barbara Gardner
Representative Barbara E. Gray
Representative David Magnani
Representative Robert Marsh
Representative Peter Trombley
Senator Lucille Hicks
Senator Edward L. Burke
Senator Argeo Cellucci
Senator David H. Locke

Enc: MetroWest Transportation Policies
Howe Street Bridge letter
Sherman's Bridge letter

[Comment #107, cont.]

Metropolitan Area Planning Council

60 Temple Place, Boston, Massachusetts, 02111 • 617-451-2770

serving 101 cities and towns in Metropolitan Boston

March 12, 1990

Mr. Thomas Glynn, Chairman
Massachusetts Bay Transportation Authority
10 Park Plaza
Boston, MA 02116

Dear Mr. Glynn:

Over the past several months the Minuteman Advisory Group on Interlocal Coordination, MAGIC, a subregion of the Metropolitan Area Planning Council has been prioritizing pressing transportation needs and methods for resolving these.

At the March 8th meeting of the MAGIC subregion it was agreed that the best solution to our area's traffic woes is through maximizing the use of available transit services, especially increasing the use of commuter rail service. MAGIC believes this goal can be achieved through the following steps:

- keeping the cost of service low;
- providing adequate parking at all stations along the Fitchburg branch line;
- vanpooling and busline improvements such as access from neighboring communities to commuter rail stations; and
- increasing commuter rail frequency through completing double tracking of the Fitchburg Branch line and station improvements.

The MAGIC group believes that these actions will prove a benefit to all of the Boston region by reducing automobile traffic into the Core area.

Sincerely,

Don Gilberti

Don Gilberti, Chairman

DG/DF/mlm
cc: Frederick Salvucci, Secretary, EOTC
David C. Soule, Executive Director, MAPC
MAGIC Representatives

Transp.
(Glynn)

Frank E. Baxter, *President* Franklin G. Ching, *Vice-President* Marjorie A. Davis, *Secretary* Martha K. Gjesteby, *Treasurer*

Executive Director: David C. Soule

MAGIC
Minuteman Advisory Group on Interlocal Coordinatio
Acton Boxborough Carlisle Concord Hudson
Littleton Marlborough Maynard Stow Sudbury
MINUTEMAN ADVISORY GROUP ON INTERLOCAL COORDINATION
60 Temple Place, Boston, MA 02111 617 / 451-2770

ATTACHMENT 1.

MAGIC'S TEN MOST IMPORTANT TRANSPORTATION IMPROVEMENTS PROJECT

1. Route 2 Lincoln to Reformatory Circle
2. Route 3 widening
3. Route 2 Reformatory Circle to Route 495
4. Route 2 Railroad Bridges west of Crosby's Corner, Concord
5. Route 27 in Acton over MTBA
6. Interstate 290 and Route 85
7. Route 111 Bridge over Route 2, Acton
8. Route 2A and Route 27
9. Route 119 Bridge in Littleton over B&M
10. Route 27 and Mass Ave., Acton

Printed on recycled paper

June 6, 1991

SWAP PRIORITIES

- Route 140 Corridor from Route 495 to Lewis Street (Franklin)

- MBTA Commuter Rail Extension (Milford and Bellingham)

- Centre Street/Dedham Street/Haven Street (Dover)

- Route 109 Corridor Improvements:
  a) Main/Farm/Pleasant Street intersection (Millis),
  b) Depot Street extension to Route 109 (Milford), and
  c) Holliston Street to Coffee Street (Medway)

- Exchange Street (Route 115)/Plain Street/Curve Street (Millis)

- Route 16 Corridor Intersection Improvements (Holliston)
  a) at Route 126/Curve Street
  b) at Locust Street
  c) at High Street
  d) at Highland Street
  e) at Route 126/Oak Street

- Route 16/27 Reconstruction (Sherborn)

- Wood Street (Route 135)/West Main Street (Hopkinton)

- Route 1 Corridor Improvements (Wrentham)
  a) at Thurston Street,
  b) at Madison Street
  c) at Myrtle Street

TREMONT PIANO SHOP
625 Tremont Street Boston, MA 02118 (617) 353-0653

P.M.T.
Sonia W. Hamel
Deputy M.P.O Exec. Sect.
C.T.P.S.
Suite 2150
State Trans. Bldg.
10 Park Plaza
Boston 02116-3968

To the P.M.T. Committee:

As a Boston South End resident & business owner, I wish to express my concern over the M.B.T.A.'s trying to force the use of the electric bus on Washington St. over the objection of the vast majority of people living along & near this corridor.

The Light rail vehicle is, by far, the right choice for this corridor because, unlike the electric bus, it provides a level of service equal to that provided by the former "EL".

The L.R.V. mode is being chosen by more & more cities, large & small, in the U.S. & Europe. When installed intelligently as for example in Portland, OR., San Jose, CA, San Diego, CA. etc., it secures the area it serves from suffering the urban decline resulting from prioritizing & encouraging urban automobile use.

The best way to understand why the modern L.R.V. is one of best means to help rejuvenate declining urban areas is to see & use any of these new systems. Short of this, the Washington St. Corridor Coalition has a good presentation on L.R.V. The public response to this presentation has been enthusiastically positive.

The M.B.T.A. conducted several legally required public hearings to find out what the public, which they supposedly serve, wants on Washington St. & made a farce of the hearing process by arrogantly ignoring

TREMONT PIANO SHOP
625 Tremont Street Boston, MA 02118 (617) 353-0653

citizens clearly expressed choice of L.R.V. The L.R.V. was also recommended by private consultants hired by the M.B.T.A. to study Washington St. replacement service. By ignoring the clear majority opinion, the M.B.T.A. violated the democratic process as thoroughly as any totalitarian state does.

All the time, labor, resources & love we have put into our urban neighborhoods to make them livable, beautiful & interesting in an urban context will be threatened if the M.B.T.A. get its way. In short, auto use will continue to grow & the physical demands it places on the urban area will lay it waste as has already happened in city after city. Washington St. will end up a four to six lane auto thoroughfare that tears the neighborhood apart.

The reports of the M.B.T.A. supporting the electric bus are exercises in false statistics & illogic. These "studies" have been refuted again & again.

The M.B.T.A. is focusing more on service to the outlying towns by, for example, expansion of commuter rail which, I agree, is needed & shows future foresight on their part. They must show equal foresight regarding the center city by selecting high quality modes like L.R.V. on major city corridors. Lesser modes like bus or electric bus are adequate on light traffic routes & as feeders to L.R.V., Metro & Commuter Rail.

Since the M.B.T.A. is a public authority created to - am I wrong - serve the public, make sure they do so by constructing an L R V on Washington St. in a beautiful urban sensitive manor. The Southend, Roxbury and Chinatown want & need it.

Thank you
Joseph Pagano

David Pelletier
12 Crombie Street, Salem, Massachusetts 01970
508-744-2654

Blue Line Options

At present the Blue Line carries the least amount of passengers of any of the 4-MBTA rapid transit lines. The principal orientation of this line is to carry Airport bound passengers, and those coming from the inner North Shore. In its present "heavy rail" configuration, expansion of this line will meet with severe restrictions as to the scope of service and areas that it may serve.

If the overall philosophy of the line were altered to accept a different type of concept of service: then the Blue Line could easily accommodate solutions to some of the MBTA's pressing congestion problems. I would like to discuss a proposed "altered" concept of service.

1. Expanded Blue Line

An expanded Blue Line can help the MBTA solve a number of problems. It can utilize otherwise under-used existing rights of way that happen to traverse some very valuable real estate, and it can also solve the tunnel congestion problem faced while forcing all passengers from the west to pass through Park Street or Government Center to connect to other lines. An expanded Blue Line can interconnect with all three other lines without coming into the downtown area at all. It will provide service to Logan Airport from 4-different areas, and begin to solve the inner circumferential problem.

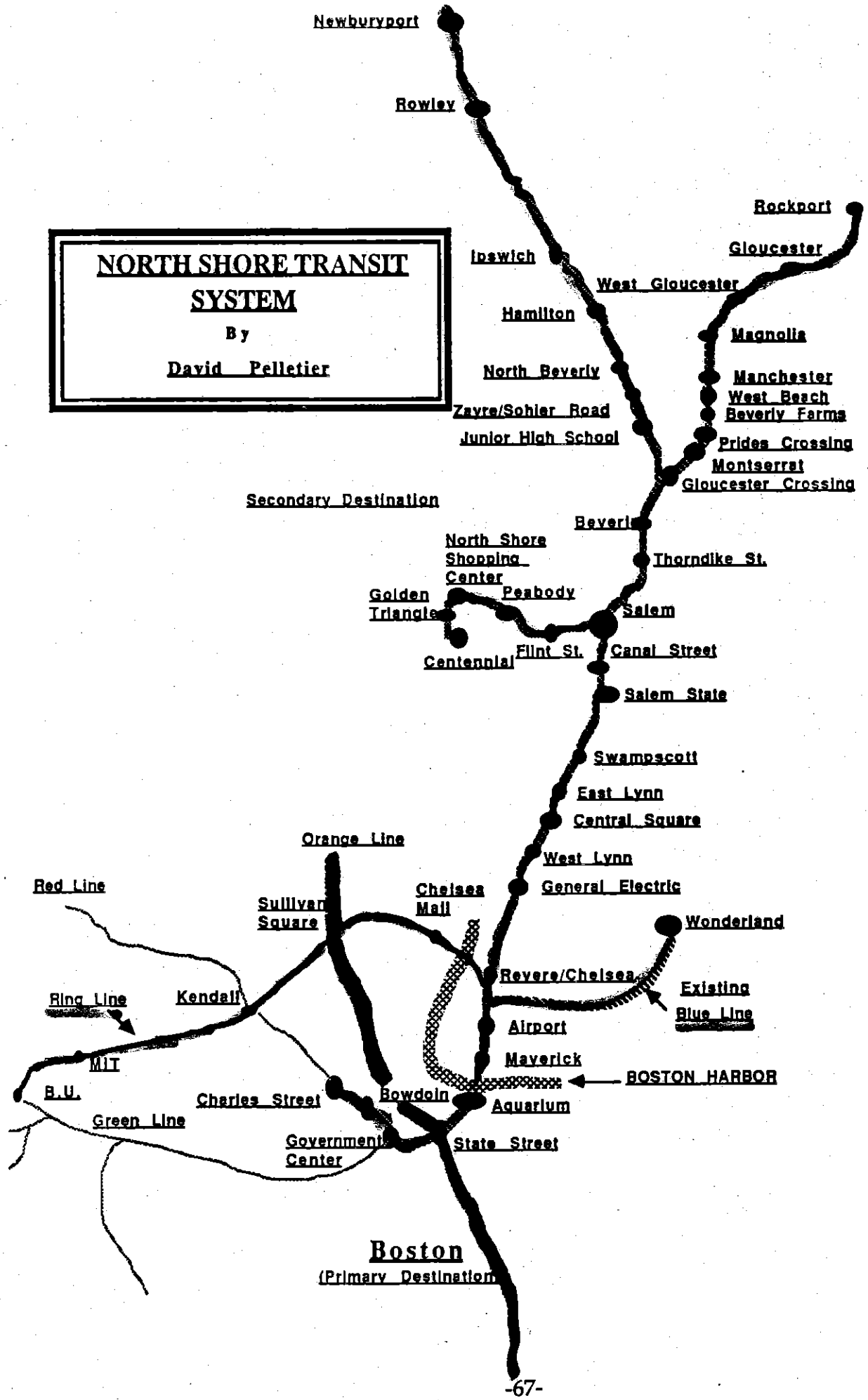
Almost all of the propose rights of way can be easily adapted to Light Rail operation. With the current plans to make the Green Line handicapped accessible, a new type of Blue Line operation can easily share some of the outer Green Line right of way to provide the widest and most flexible kind of service at the lowest cost. If further expansion in the northern or western areas are desirable, you will have the perfect vehicle to serve these needs, again with the minimum of cost.

2. Existing Route

The existing Blue Line Route would become the Revere Branch. All of the present station stops would be maintained. With the addition of the "Main Line" to be described in Section 3, most of the current North Shore customers would be serviced by this new line and will not have to travel to the Revere Branch. The Revere Branch would serve the beach crowd, and the residential areas of Revere and Winthrop.

3. Main Line

The primary service on the Blue Line to the north would be on a new branch that splits from the existing Blue Line just north of Airport Station, travels up the East Boston Branch and joins the current commuter rail right of way at Revere Junction. The commuter rail line would be converted to Light Rail operation and service would be provided to Newburyport, Rockport, and a new branch to West Peabody. This service would use the existing tracks and stations of the commuter rail line. In areas where there has been significant decay in the quality of the right of way, these would be replaced with new rail, ties etc. Most of this line is already in class A condition.


NORTH SHORE TRANSIT SYSTEM
By
David Pelletier
Newburyport
Rowley
Ipswich
Hamilton
North Beverly
Zayre/Sohier Road
Junior High School
Rockport
Gloucester
West Gloucester
Magnolia
Manchester
West Beach
Beverly Farms
Prides Crossing
Montserrat
Gloucester Crossing
Secondary Destination
Beverly
North Shore Shopping Center
Thorndike St.
Golden Triangle
Peabody
Salem
Centennial
Flint St.
Canal Street
Salem State
Swampscott
East Lynn
Central Square
Orange Line
West Lynn
Red Line
General Electric
Sullivan Square
Chelsea Mall
Wonderland
Revere/Chelsea
Existing Blue Line
Ring Line
Kendall
Airport
MIT
Maverick
BOSTON HARBOR
B.U.
Charles Street
Bowdoin
Aquarium
Green Line
Government Center
State Street
Boston
(Primary Destination)

4. Ring Line

A key element to the congestion solution is the Ring Line. If a train were to depart from Airport Station cross over to the Main Line, and then switch onto the Ring Line: It would cross over Chelsea Creek, pass the Chelsea Mall operate on the former Eastern Branch tracks over the new bridge spanning the Mystic river, connect with the Orange Line at Sullivan Square, pass under the Orange Line, under the Lowell Branch, and travel along the Grand Junction freight right of way, passing over the Fitchburg Branch and then on through Cambridge, the High Tech research corrider, pass next to the Kendall Red Line Station, go behind MIT and the Cambridgeport Residential neighborhood, cross under the B.U. Bridge and then join the "B" Green Line tracks at Nickerson Field. Options for this line after this point include service to Watertown, or Reservoir/Cleveland Circle or even to Riverside.

Because all of these lines operate in a multitude of rights of way, it would be necessary to find a vehicle that can compromise with the reqirements necessitated by this wide service potential.

5. Central City

There has been a proposal to extend Blue Line service to Charles Street Station so that it could connect with the Red Line. This has already been done in the past. During the street car era, a tunnel portal was provided in the center of Cambridge St. so that the street cars could pass over the Longfellow Bridge. If this connection takes place, there will be a second connection to the Red Line to the Blue Line.

6. Connections

Connections to other "T" lines would be:

Orange Line: at State and Sullivan Square

Red Line: at Kendall and Charles

Green Line: at Government Center and Nickerson Field, Cleveland Circle or Reservoir.

7. Light Rail Blue Line

Change the Blue Line to Alsthom Atlantique or "Grenoble" type LRV's. This will accommodate handicapped riders and will allow the flexibility of routing that will be proposed in a later part of this discussion. A two-car train of articulated vehicles will offer 8-doors to the platform for walk-on walk-off service. It will be able to operate from minimal height platforms and the costs of building new stations will be kept to a minimal expense.

This type of vehicle will allow the Blue Line to operate in a mixed boarding scenario. It will pick passengers up from turnstyle stations, as well as usage of pre-paid pass fares. A wide 2+2 seating vehicle is available for usage on the proposed long haul lines. These offer 72-seats minimum, and can be restructured to fit a few more.

8. Station Modifications

In 1924, the original 5 Blue Line Stations were reconstructed from low platform to high platform types in a single weekend. This allowed for the change-over from street car to rapid transit type of service. In this proposal the reverse will need to happen to these stations and to the other newer stationss construted in the 1950's.

9. Major Construction

Most of the structural facilities to accommodate the above system are already in place. In many places the system is already operating in grade separated private right of way. Most of the lines are parrelled by high tension power lines that may provide energy to sub stations along the line. Throughout the line are brand new track, ties, over and underpasses, crossing gates, signals, and bridges. All of these can be utilized and will not become an additional expense, because these items are already built.

There are a few structural items that will need to be built to accommodate the service to be provided. You must cross over Rte. 128 in Peabody to access the North Shore Shopping Center. You also must pass over the Conrail tracks at Beacon Park to avoid conflicts with East/West freight traffic. Lastly a new drawbridge would have to be built over Chelsea Creek, unless you want to share this stretch with vehicular traffic.

There are very few takings that will be necessary to accomplish this transformation.I know of only one building, and possibly two street right of ways that will need to be utilized.

Other than that, the creation of specific station locations and altering the existing stations for lower platform heights, will give you a system that will continue to serve the North Shore better than the old Blue Line and Commuter Rail combined, as well as giving you the means to integrate the Blue and Green Lines with compatable equipment that can share routes, repair facilities. The new circumfrential distribution should attract a large number of riders to one of Cambridge's most populated sections.

10. Costs

Utilizing the budget information for constructing the Light Rail Systems in Portland, Oregon; and Sacramento, California; I would estimate that it would cost @ $780,000 per mile to electrify the 66-miles of this system. This comes to $51,400,000 . With trackwork and signals added this should all come to under $110,000,000. Major expenses after that would be for the above mentioned construction and takings, and the Light Rail Vehicles. Existing repair facilities can be adapted to serve the needs of the new system.

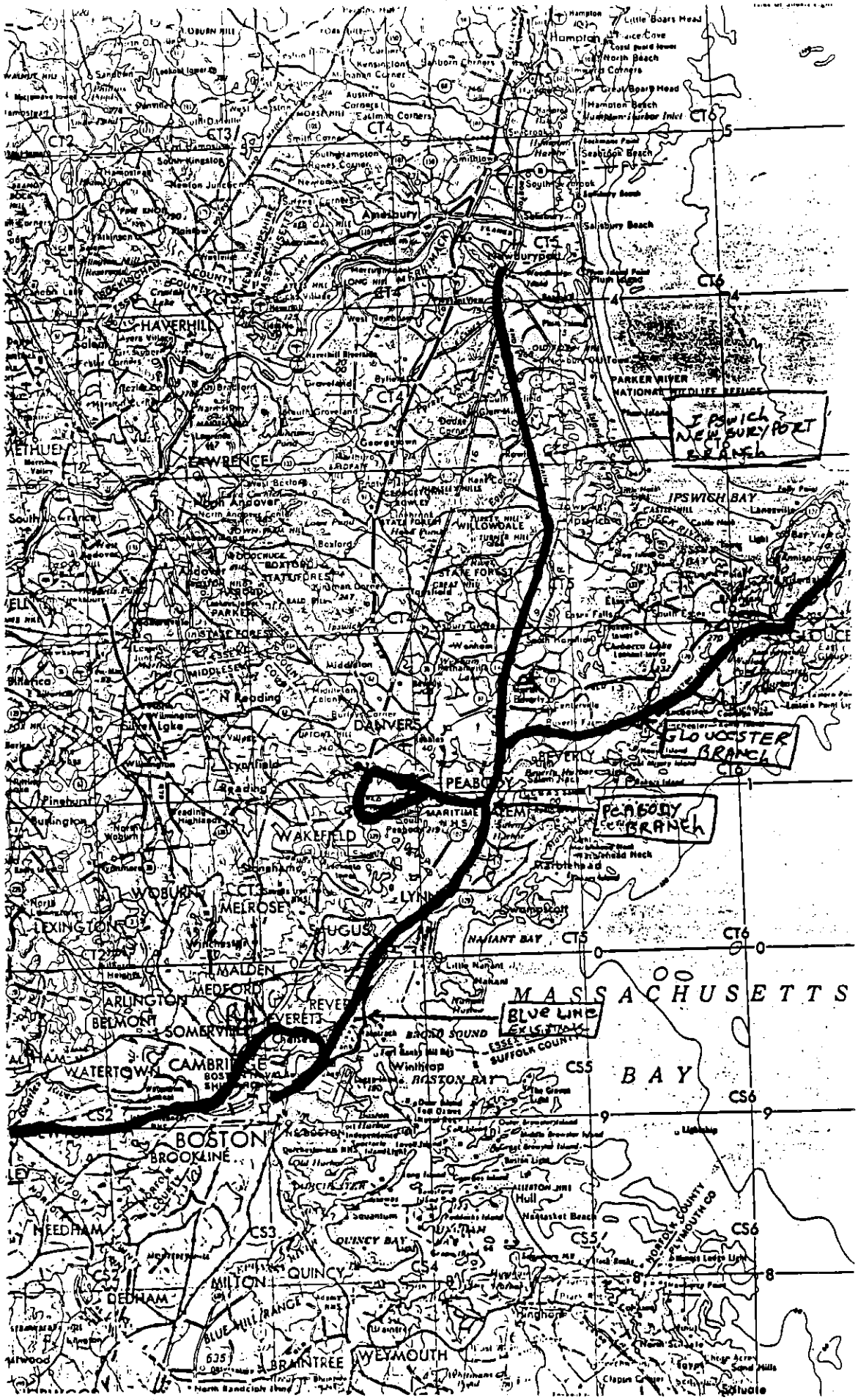
Total system cost, less engineering, administration, and the Charles St. station interface, should be less than $225,000,000. This is alot of bang (66-miles) for the buck!

Food for Thought

The following items were proposed in the original Blue Line to Lynn plan but they and their cost can be eliminated in Pelletier Blue Line Plan.

1. Revere Street overpass
2. Tunnel under Rte. 1A
3. Boat Section through tidal marshes
4. Shifting commuter rail 60-feet west
5. Boat section through Oak Island
6. A new embankment through the Pines River and the Lynn Marshes
7. A new high–level bridge over the Saugus River
8. Widening the Pines River Bridge
9. 700-car garage in West Lynn
10. Rebuilding a 4-track right of way from G.E. to downtown Lynn.
11. Elimination of 1,000 parking spaces in old garage proposal (2,000 spaces) (new garage has 1,000 spaces)
12. Relocation of High Tension electric lines.

All of the above cost over $185,000,000. None of it is needed to allow the Blue Line to be extended to the North Shore.


IPSWICH NEWBURYPORT BRANCH
GLOUCESTER BRANCH
PEABODY BRANCH
BLUE LINE EXISTING
MASSACHUSETTS BAY
IPSWICH BAY
HAVERHILL
LAWRENCE
North Andover
WILLOWDALE
Amesbury
Newburyport
Salisbury Beach
Hampton
PARKER RIVER NATIONAL WILDLIFE REFUGE
Georgetown
Boxford
Middleton
North Reading
DANVERS
Reading
PEABODY
WAKEFIELD
Stoneham
WOBURN
MELROSE
LYNN
LEXINGTON
MALDEN
MEDFORD
ARLINGTON
BELMONT
SOMERVILLE
CAMBRIDGE
WATERTOWN
BOSTON
BROOKLINE
NEEDHAM
DEDHAM
QUINCY
MILTON
BRAINTREE
WEYMOUTH
Winthrop
Hull
Nahant
Lynnfield
Pinehurst
Burlington
Winchester
Lexington
Belmont
Watertown
Brookline
Dedham
Milton
Quincy
Braintree
Weymouth
Hingham
Saugus
Revere
Everett
Somerville
Cambridge
Boston
Malden
Medford
Arlington
Woburn
Melrose
Stoneham
Wakefield
Lynn
Peabody
Danvers
Reading
Middleton
Georgetown
Boxford
Amesbury
Newburyport
Salisbury Beach
Hampton
Hampton Beach
Seabrook Beach
Rockport
Gloucester
Essex
Ipswich
Lawrence
Haverhill
Winthrop
Boston Bay
Quincy Bay
Nahant Bay
Hingham Bay
Boston Sound
Blue Hill Range
Essex County
Suffolk County
Norfolk County
Plymouth Co
CT2
CT3
CT4
CT5
CT6
CS2
CS3
CS4
CS5
CS6

Building A North Shore Transit System

by David Pelletier

The following proposal has nothing to do with old fashioned trolley cars running on streetcar tracks being laid in streets, or any other romanticized notions of how the transit of the past, can also become the transit of the future. This proposal is about solving a problem that is shared by all communities on the North Shore.

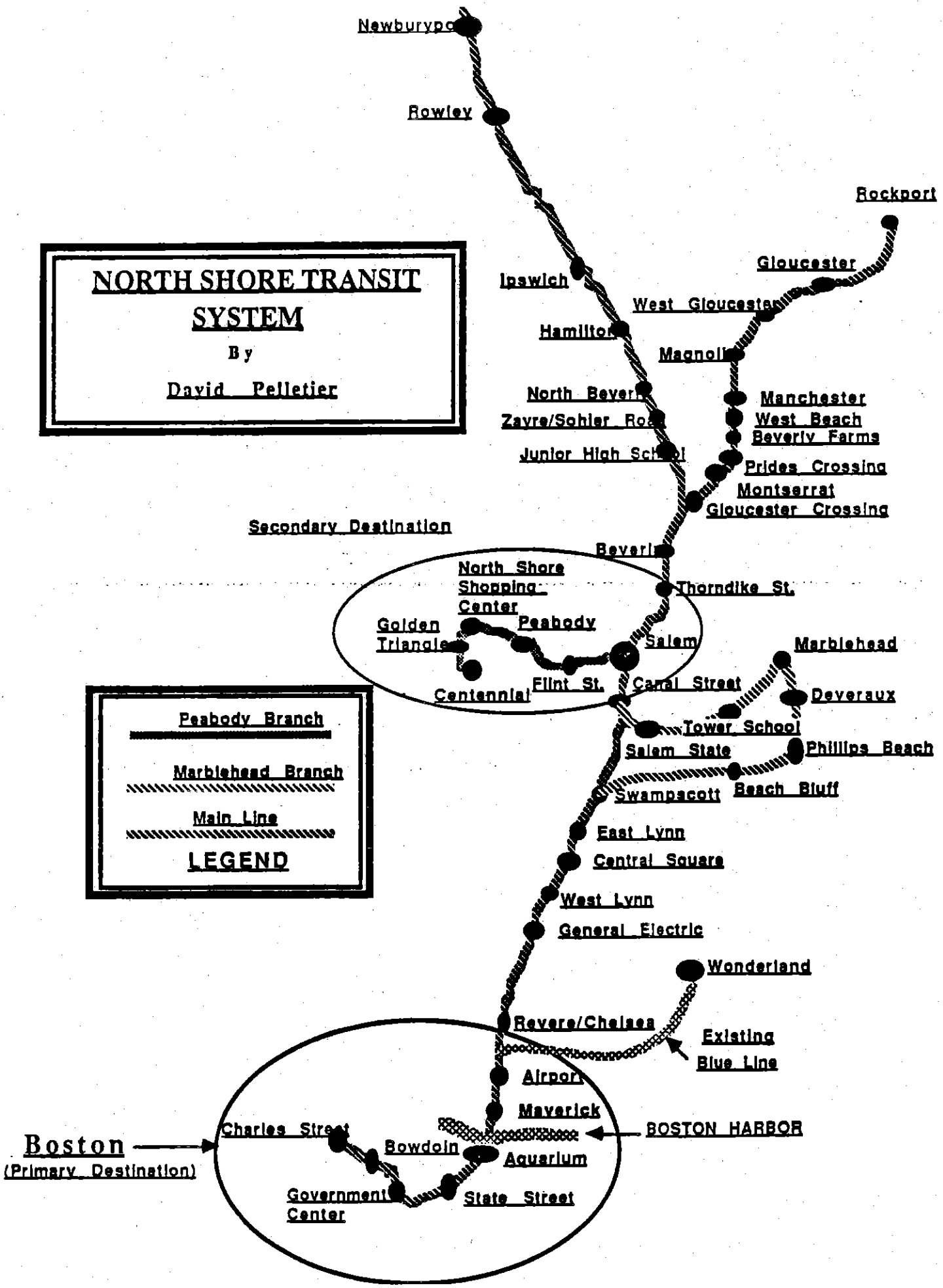
1. Why do we need an improved public transit system?

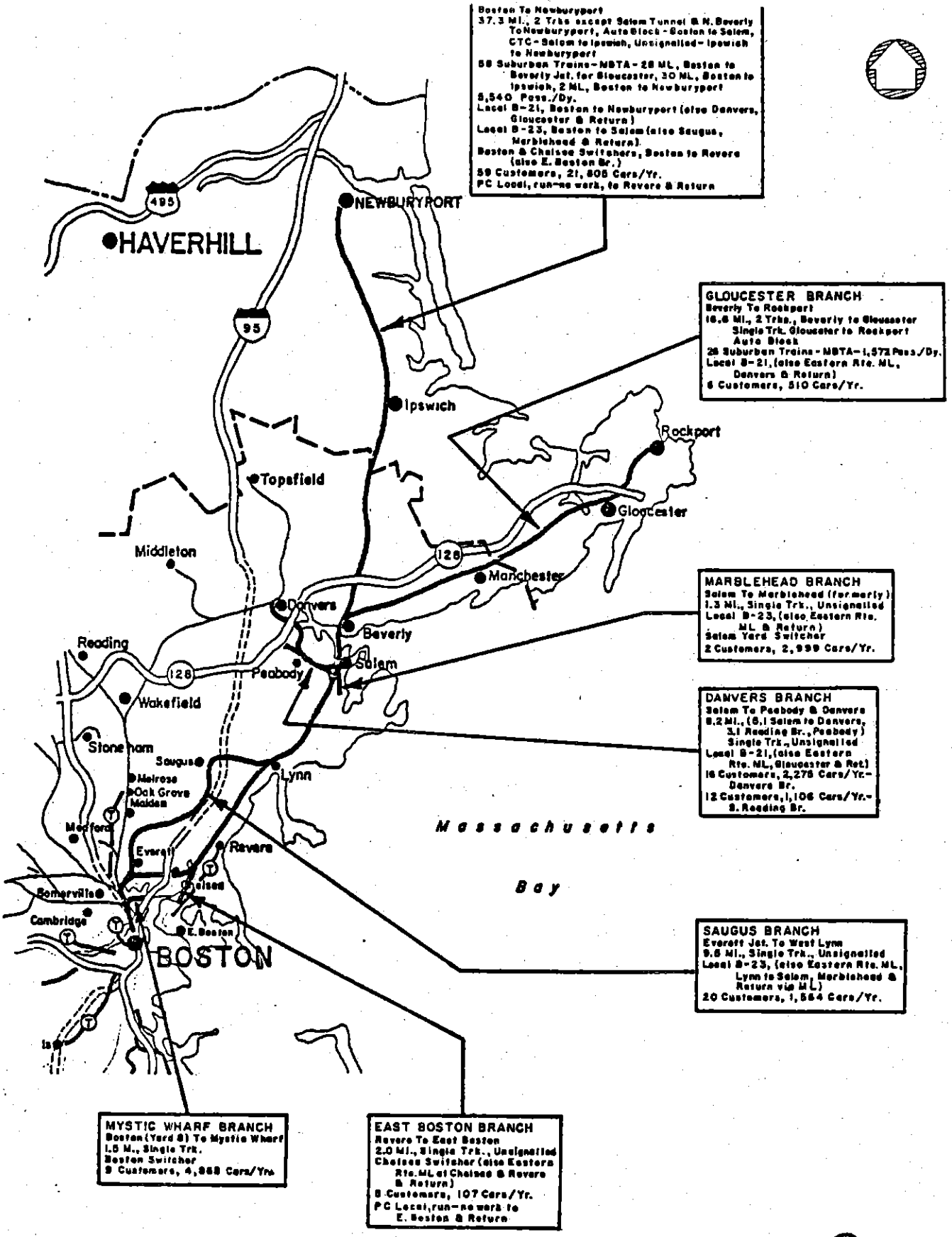
The road system of the North Shore, located inside of Rte. 128, was designed for a different era . The construction that has sprung up around the existing road system has allowed the North Shore to retain a certain character that is unique to the area. This character is what makes the North Shore different from other areas in the United States and is a very big part of the quality of life that makes living in this area attractive.

To significantly alter the existing road patterns in this area will probably cost more than is gained. To some; it would be very easy to level what stood in the way of progress and road construction to make traffic flow easier. Many buildings could be removed to provide easy and convenient parking. What you would have in the end is what many cities and towns across the country have, lots of access and lots of parking, but no-place to go. That is not an answer.

We are already facing the problem of having extremely high levels of traffic along the portion of Rte. 128 that serves the North Shore. At 2-PM the traffic today, looks like rush hour did 10 years ago. The rush hour period is even worse due to the large numbers of people commuting to Boston, to other Rte. 128 locations and between the cities and towns of the North Shore.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654


NORTH SHORE TRANSIT SYSTEM
By
David Pelletier
Newburyport
Rowley
Ipswich
Hamilton
North Beverly
Zayre/Sohier Road
Junior High School
Rockport
Gloucester
West Gloucester
Magnolia
Manchester
West Beach
Beverly Farms
Prides Crossing
Montserrat
Gloucester Crossing
Secondary Destination
Beverly
North Shore Shopping Center
Thorndike St.
Golden Triangle
Peabody
Salem
Centennial
Flint St.
Canal Street
Marblehead
Deveraux
Tower School
Salem State
Phillips Beach
Beach Bluff
Swampscott
Peabody Branch
Marblehead Branch
Main Line
LEGEND
East Lynn
Central Square
West Lynn
General Electric
Wonderland
Revere/Chelsea
Existing Blue Line
Airport
Maverick
BOSTON HARBOR
Boston
(Primary Destination)
Charles Street
Bowdoin
Aquarium
Government Center
State Street



NORTHEAST SECTOI

May 1972

Thomas K. Dyer, Inc.

The new interchange connecting to Rte. 95 will probably provide increased traffic loads over this stretch. The present building boom is starting to make Rte 128 look more like a 1985 version of Main Street, where all of the traffic flow serving an entire area is channeled over one four-lane road.

Many city administrators, have watched over the years, how channeling all of this energy into a single road-region has affected the marketability of their existing retail and commercial areas. Those cities that surround the highway have capitalized by using their available large tracts of former farmland and swamps. Those cities that do not have the highway running through them and do not have large tracts of readily available land for development, have fallen behind.

With this in mind I would like to propose a partial solution that will remove a portion of the traffic that is causing this dilema in many cities on the North Shore and alter the travel habits of others. The end result will be easier traffic flow over the existing street system, relief from increased parking congestion, the potential for greater downtown development and marketability, a large increase in public transit ridership and a means to tie the entire North Shore together as an inter-related economic unit that can compete on more favorable terms with areas to the south and west of Boston.

2. How can Public Transportation play a role in solving the traffic problems of the North Shore?

Public transit needs to offer the traveler things that will make it an attractive alternative to the private automobile.

It needs to be:

1. **Fast**
2. **Safe**
3. **Clean**
4. **Reliable**
5. **Convenient**
6. **Affordable**

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

At present we have an decent commuter rail system. The current re-building program will offer vast improvements in speed and comfort to the existing rail passenger. I think that any observer of the current rebuilding program would be amazed at the speed and apparent simplicity that is involved with improving the rail system.

Indirectly; the T is already building and re-building the basics of a transit system similar to the Riverside Line of the MBTA's Green Line. Except for the electrical apparatus (overhead wire, sub-stations, and signal modifications) and the electrically propelled vehicles, almost everything is in place to create a 1st rate intra-regional rail rapid transit system.

To be successful, a transit system must offer service to a dense population area. There must be specific destinations that can attract and provide riders who wish to use the services available at or near each stop. The more diverse the services are then the more successful the transit system is likely to be.

To ensure the success, on the North Shore, of a converted commuter rail system to electric transit it must do all of the things listed above in each of the communities it serves better than the existing arrangement.

It must specifically:

1. Provide a better distribution in the Boston Central Business District

2. Provide a shorter trip time between individual stops and on the overall trip for Boston Commuters.

3. Make Peabody the second destination in the areas of Rte. 128, the shopping malls, and the new industrial parks by using the Peabody Right of Way alignment.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

4. Gain an express access to Boston, utilizing the East Boston alignment to a point 400 yards north of the Blue Line Logan Airport Station, and joining the Blue Line Right-of Way as a branch operation, entering Boston through the tunnel under Boston Harbor.

5. Generate a great deal of reverse commuting business to the Peabody Industrial areas and the malls.

The above Right-of Ways are intact at present. All of them can support a pair of tracks to offer non-conflicting operation in two directions.

All normal Boston & Maine freight service will be able to operate with only minor changes in scheduling. (usually improved speed, in most cases)

With the transit system arranged on these alignments, and with the current commuter rail vehicles replaced with articulated light rail vehicles, you will be able to offer more service to more areas with the same number of employees that it takes to operate the commuter rail trains with lesser service level.

This rise in service frequency, quality of vehicle, better destination distribution, shorter trip time, convenience of stops, and probably a lower fare, will encourage those who currently do all of their transportation by automobile to reconsider this alternative as an attractive means of commuting to work, play, school, shopping, and business.

By shifting some of the road users to transit at existing, and new locations, you will be freeing up access capability in those cities with the worst road systems and lessening their parking problems by distributing these vehicles to a new segment (Peabody) in the transit network.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

3. Why will a system proposed in this fashion offer more benefits than the original Blue Line to Lynn proposal.

This system provides a single system that gives all of the positive benefits that the Blue Line offered. It does this at greatly reduced expense, in construction and operation. With the $225, 000,000 Blue Line Extension, it would be necessary to also maintain the existing Commuter Rail Network in its present form. All of the work currently being done on the commuter rail system would, eventually, have to be done. The bill for this was $107,000,000. Much of this work has now been done or will be completed shortly.

So, for about $332,000,000 you would have had approximately the exact same thing that you have now, except that Lynn would have two very expensive rapid transit stations with huge garages that would be very difficult for anyone else on the North Shore to use, and you would have alot of massive construction and very little real transportation improvement.

The system that I am proposing is a similar system to that which is operating as the Riverside Line of the MBTA. Almost everything is in place to transform the existing commuter rail line into a rapid transit line. There are two small sections of Right of Way that will need to be re-built. These cover approximately 4-miles. There are no takings on the North Shore, involved in any of this conversion. (The proposed Blue Line extension involved over 100) Almost all of the structures necessary to maintain a grade crossing free Right of Way are also in place over the entire distance from Boston, to Flint St. on the Peabody branch, and to the end of the new railroad bridge on the Beverly branch.

What would be the most expensive structures on the entire system are also in place. These are the Salem tunnel and the overpass on Rte. C-1 in East Boston. The later structure allows for a direct connection into the Blue Line system just north of Logan Airport station. **At present there is an uninterupted right of way that extends from the commuter rail system directly into the Blue Line system.**

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

The only major construction necessary on the proposed system would be an overpass that crosses Rte. 128 in Peabody and construction of a link to the Centennial Industrial Area. A proposed maintenance facility could also be necessary, eventually. This could be constructed within the confines of the existing B & M freight storage yards off of Jefferson Avenue in Salem.

Unlike the Blue Line to Lynn proposal; the system that I am proposing, replaces the Commuter Rail line completely. It goes to the same Boston destinations that the Blue Line proposal would and it will go to them faster and more conveniently with fewer stops south of Lynn. I doubt very much if many people from the North Shore wish to stop at places like Wonderland, Beachmont, and Wood Island etc. as part of their daily commute to Boston.

Instead the North Shore line would originate in Boston at the Bowdoin loop, travel to Government Center (Green Line transfer), State St. (Orange Line transfer), Aquarium, Maverick, Logan Airport(Wonderland transfer), General Electric, Lynn, Swampscott, South Salem, and North Salem. At North Salem station the vehicles would be routed to either the Peabody, Ipswich, or Gloucester branches.

Stops on the Peabody branch could consist of Flint St., Boston St., Peabody Square, Rte. 128, North Shore Shopping Center, and 2 in Centennial Industrial Park.

Stops on the Ipswich branch would remain relatively the same, with some new flag stops added.

Stops on the Gloucester branch could take into account its access to the ocean recreation area and a new stop at Gloucester crossing in Beverly.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

4. Why would a Light Rail Vehicle be the choice for such a system.

These routes are operated with light rail vehicles that can be loaded at street level and at rapid transit platform level, as in San Francisco. They can operate any where a regular Rapid Transit Car can.

Since the Boston Harbor Tunnel was originally designed, in 1904 for the same Streetcars that use the 1897 Green Line subway there should be very few problems in adapting what is in place on the present Blue Line for use by Light Rail Vehicles. I am aware that there will need to be some modification. Both types of vehicle should be able to exist on the same system, and the difference in vehicle type will designate whether one is entering a North Shore car or a Wonderland car.

Other features which make Light Rail operation suitable for this system are: they can be more flexible in the selection of stop locations. They accelerate and decelerate in much shorter distances than diesel powered commuter trains and their length is much shorter so that they pass through grade crossings in a shorter amount of time. They are able to maintain high rates of speed over open areas and are much quieter than diesels. They do not need to be left running all night in any kind of weather.

A Light Rail Vehicle requires one operator that can operate up to a 3-car train. Each Blue line train of 4-cars requires 3, and each commuter train requires a minimum of 3 and usually more during rush hours. These staffing levels could be put to better use if each person were operating a Light Rail Vehicle at closer headways than 'once an hour' during the day and every 20- minutes during rush hour.

Using the same staffing levels as a commuter rail train, replaced by LRV operation, you could provide service from Salem to Boston during the day every 15 minutes. During rush hour it would be every 7 minutes.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

Service on the Peabody branch would be every 1/2 hour during the day and every 14 minutes during rush hour.

Service on the Ipswich and Gloucester branches would be reduced from every 2-hours during the day with commuter rail, to every hour. During rush hour it would be every 25 minutes.

This service schedule is a vast improvement in convenience over the existing system and it still uses the same amount of staffing and vehicles as the existing system. The destination choices have also been vastly improved.

5. Where does this system go that is such an improvement over the existing system.

The proposed system offers direct Salem to Government Center access in under 20 minutes. It offers direct Salem to Logan Airport access in under 15 minutes. It currently takes at least an hour or more to reach both of these destinations by commuter rail, transit or bus.

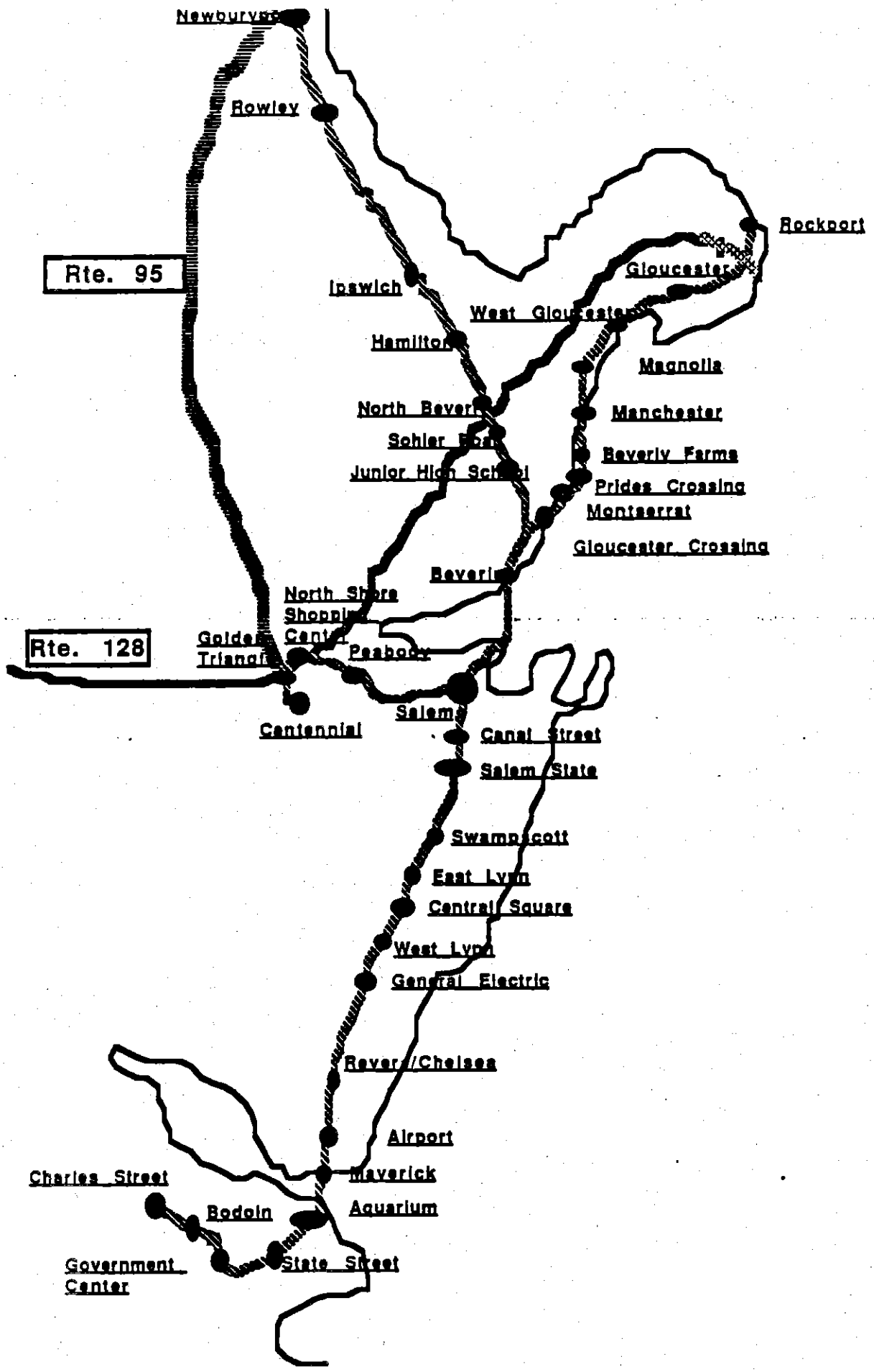
It will be able to offer better service because it goes to where people come from and takes them very close to where they are likely to want to go.

On the North Shore and New Hampshire, these are, the Downtowns of:

Salem	**Ipswich**
Peabody	**Newburyport**
Manchester	**Lynn**
Gloucester	**Beverly**
Rockport	**Hamilton**
Swampscott	**Marblehead**
Danvers	**Wenham**
Rowley	Hampton Beach N.H.
Seabrook N.H.	**Portsmouth,N.H.**

Pease Air Force Base (New Airport)

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654


Newburyport
Rowley
Rte. 95
Ipswich
Hamilton
North Beverly
Sohier Park
Junior High School
Rockport
Gloucester
West Gloucester
Magnolia
Manchester
Beverly Farms
Prides Crossing
Montserrat
Gloucester Crossing
Beverly
North Shore Shopping Center
Rte. 128
Golden Triangle
Peabody
Centennial
Salem
Canal Street
Salem State
Swampscott
East Lynn
Central Square
West Lynn
General Electric
Revere/Chelsea
Airport
Maverick
Aquarium
Charles Street
Bodoin
Government Center
State Street

Major institutions served are:

Logan Airport, Salem State College, North Shore Community College at Lynn, General Electric, North Shore Shopping Center, Liberty Tree Mall, Centennial Industrial Park, The Golden Triangle, United Shoe Facility, The Gloucester Industrial Park, GTE Sylvania,The Lynnway Industrial area, Rte. 128, Rte. 95, various popular beaches and other recreational areas, and many historic attractions.

There are other right of ways that serve the towns of Marblehead, Swampscott, Danvers and Topsfield (right next to the fair site). These can be preserved as an inventory for potential future service.

The existing commuter rail system is primarily geared toward getting people into and out of Boston, only. **The proposed system can play a greater role in expanding intra-regional travel.** (ex. Hamilton to the North Shore Shopping Center, or Peabody to Singing Beach in Manchester). This capability does not exist under the present set-up.

6. Why would a changeover in systems contribute to more economic growth and community improvement.

By greatly improving the transit tie to Boston and utilizing a vehicle that is clean, fast and efficient, you will be able to consider existing sites for potential growth and expansion that are currently decaying . Such areas that come to mind are the area surrounding the railroad in Peabody Square, The North River area in Salem, and various air rights locations in Salem.

Due to the quiet nature of these vehicles, mixed use developments could be constructed to take advantage of the close location to the future transit site. The attractive design of the vehicles and the modern atmosphere that they promote will tend to give an up-scale atmosphere to the cities and towns that are served by the system. This atmosphere is something that companies and developers will look upon as another one of the major assets that are available by doing business on the North Shore. This would be one more tool to use in marketing the high quality of life that is also available on the North Shore.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

7. How could such a system be financed?

At present each city and town in the MBTA region is assesed a fee to help support the T. We are paying for a train system and a bus system. If the Blue Line had made it to Lynn we would be paying for that too. There always seems to be money available if the right people want it.

The MBTA will be looking to buy $50,000,000 worth of additional commuter rail train sets for the proposed re-activation of the Old Colony Line on the south shore. If they took the train-sets that are currently being used to provide service to the North Shore and re-located them to the lines that would be getting the new train-sets, then that would be $50,000,000 more that could be spent to buy 40+ Light Rail Vehicles.

The next step would be to complete the Peabody and East Boston right of ways. We have all seen how speedy and efficient the T is with the Ipswich and Gloucester right of ways that were completely rebuilt following the Salem-Beverly railroad bridge fire. They were dealing with over 20 miles of track on those two branches. I am asking them to rebuild 4-miles of track over existing double track right of way. This rebuild could also come out of the $50,000,000 and would provide the connection into the Blue Line System.

The last item that would need major funding is the electrification. Massachusetts Electric maintains an easement along a large percentage of the right of way that is used by this system. It would be very convenient to pick-off power from these high-tension lines at various sub-stations along the route. By having this power source readily available along the route saves many millions of dollars that a distribution network would cost. It provides Massachusetts Electric with a new source of income. They have discussed the possibility of even providing the catenary poles and power grid at their expense, (T.K. Dyer study 1972) so that they could have this new source of income available to them. It will also allow them to use some of their extra capacity during moments of low demand.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

Power would be provided by overhead catenary wire that feeds the vehicle through a pole or a pantagraph. In the Blue Line Tunnel a third-rail shoe would pick up the power from a third rail.

A simple block signal system could be used to provide saftey and protection at first, and a more elaborate in-cab signal system could be implemented once service has gotten underway. This method would help keep start-up costs down and allow the system a period of time to settle into an average operating pattern based on demand and distribution.

I believe that the entire system could be implemented for well under $150,000,000. By transit standards this is cheap. The Red and Orange Line extensions will cost almost 1 billion dollars when they are completed. The North Shore system will do more at this price than the combined commuter rail improvement program and the Blue Line to Lynn Project would have done for $332,000,000. If the local elected officials were willing to back the Blue Line/Commuter Rail project at that price, then it would make sense that they give a better distributed project a shot at 50% of that price.

8. What about Environmental Impact Statements etc.

There will undoubtedly be a need for Federal money to implement the program. These grants come with all sorts of strings attatched, from beepers on the back of any vehicle that moves in a reverse direction to the Environmental Impact Statement.

All of the right of ways in question were former steam railroad lines, or diesel railroad lines. In either of these forms they produced more pollution, noise, and visual obstruction than the proposed system will. Each right of way is also bordered by poles carrying various electrical and siginal currents. A visual environment is already established that will not be changed. We would be going from something that is environmentally opposed to someting that is environmentally improved.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

A very large environmental impact statement was prepared for the proposed Blue Line Project. Much of the information that is contained in that report is still valid. All of the problems that are contained in that report are still valid too.

Things such as Federal staffing requirements can be met by having the MBTA operate and maintain the entire system. They have a staff in place that specializes in this type of activity.

9. Why should the North Shore get such a Transit Development?

Every area in the Boston Metropolitan Region has some major transportation facility. Whether it be I-93 to Reading/Lowell, or The Mass Pike/Riverside Line to the west, or The Red Line/Southeast Expressway/Rte. 3 to the south, they all have much more extensive access than the North Shore.

We are penalized by a Bridge and a Tunnel that are both unsuited for speedy transit into and out of Boston. We suffer from the road system that was described in section #1 of this article. We do possess a system of rail right of ways that are used to very little of their capacity. We need to employ this unused capacity, in association with improved road schemes to overcome the tortureous transport conditions that exist here on the North Shore.

The North Shore would have a system of Light Rail vehicles and busses that would interact with each other. Much of the current bus load would be transfered to the LRV. The bus routes that are still necessary would be scheduled to inter-act with the LRV'S, instead of the seemingly autonomous system that we have at present.

We need to learn to use what we have available to us, to help keep what we have ,so that this area of the Commonwealth can remain a beautiful and unique treasure for all to share and enjoy. A proper transit system will assist the people of the North Shore in acheiving that goal.

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

10. Closing

The proposed system is simple to implement. It needs the right people to want it. I have arrived at the present form of this system by following the pattern of curiosity, self education, being devil's advocated to death, and asking alot of questions to alot of people since 1979. I have learned alot about transit. I know alot about the North Shore. It is feasible, and it will do what I am saying it will do.

I am asking, pleading, and praying that those of you who are responsible for the future directions that the North Shore must take, not to put anything in the way of this future transit development. by destroying the existing right of ways. It is something that would be great now, but will be a necessity in the future. Please do not ruin something that you are so close to having for the benefit of future generations of people who want to make the North Shore their home.

Remember: everyone laughed when Peabody was predicted to be the action spot of the North Shore, 25 years ago. Tables turn!

Written: Oct. 11, 1985

David Pelletier 12 Crombie Street Salem, Mass. 01970 508-744-2654

Comments submitted by
Chris Torre
33 Walbridge Street
Allston, MA 02134

1

Proposed West Corridor Rapid Transit

This proposal consists of operating a new rapid transit service in combination with the existing Framingham Commuter Rail (see track plan). The new service would begin at South Station at a separate platform. Both services would then use the same two existing tracks with stations at Back Bay, Hynes (for transit only), and Lansdowne Street (Kenmore). In Allston, additional tracks would enable the two services to separate. The transit line would have three stations in Allston, a large intermodal station in Brighton, and would then diverge in a tunnel to Brighton Center. Transit trains would operate every eight minutes with commuter trains in between, creating four minute intervals.

Existing and proposed service is compared in the following section (also see diagram).

Allston, Brighton

Existing

1. Slow local surface lanes
2. Widely variable timing with bunching and standees
3. Slowed by load "spikes"
4. Low usage at outer end of lines
5. South side rail, Orange line via Red or walk from Copley

New

1. High Speed regional line
2. Uniform timing and high capacity
3. Would reduce load on bus and B line
4. Creates integrated West Corridor
5. Direct connections for all Green branches

Green Line Tunnel

Existing

1. Green Line near capacity in tunnel, peak hours

New

1. Would remove most Red Line South, Orange and South Side Rail from Green, and serve Old Colony and South Station buses directly

Watertown Turnpike Bus Corridor

Existing

1. Peak hour service; must use schedule midday, evening, Saturday, or long local bus route from Kenmore or Harvard with schedule night and Sunday
2. Complex route arrangements; must obtain schedule and Route map
3. Bus stops on sidewalk, no free connections, expensive

New

1. Rail line is primary access to region, with constant service
2. Rail line shown on T map
3. Connects corridor to rail transit system

Waltham Feeder Bus Region

Existing

1. Low amount of Feeders to Watertown buses
2. Long, slow bus route to Central

New

1. Increased service, directly on to turnpike (peak) or to transit station
2. Reduces load on bus

North Allston

Existing

1. Three local bus routes feed to Harvard or Central, One route also connects to Green Lines forming long, slow route to

Kenmore
2. Bunching, standees in peak hours

New

1. Three routes would also feed to new line, in opposite direction, doubling options
2. Would reduce Downtown loads on buses

Regionwide

Existing

1. No auto park existing
2. System not competitive with Turnpike, Storrow or Commonwealth Avenue

New

1. Park at station
2. System competitive with Highways for all users

On the section of the line where transit and commuter trains are combined, the signal system would provide ATC for transit and color light signals for commuter rail. All of the outbound trains would leave South station on an integrated schedule. For comparison, this operation would be similar to the operation of the two Red Line branches during the peak hour, but with less than one third the amount of Braintree trains.

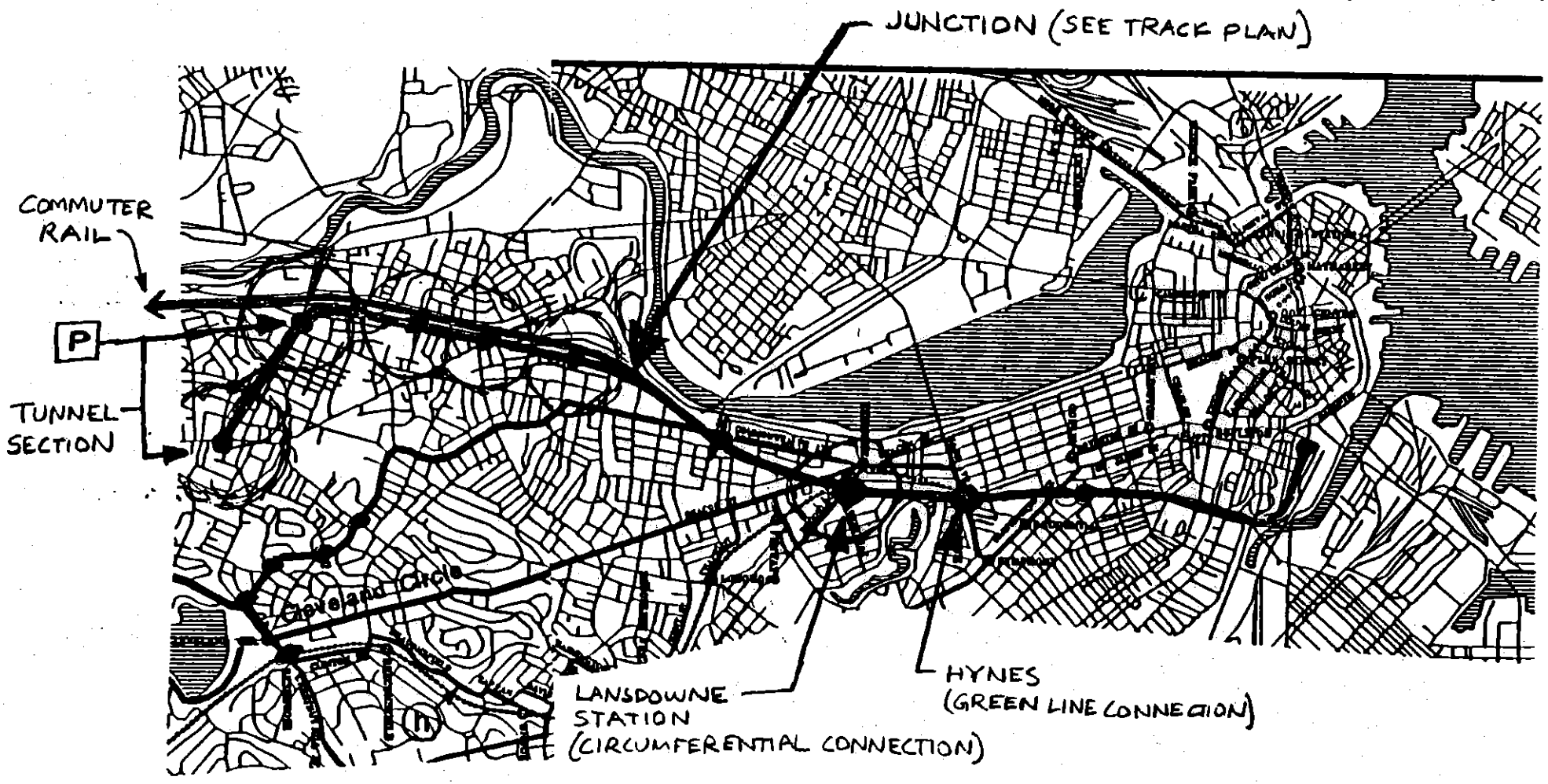
Commuter Rail

With the proposed Rapid Transit, Commuter Rail operations would have to be modified (see diagram). Current plans for the Worcester Line have two services, every 30 minutes each. This would produce a train every 15 minutes during the peak period. With the proposed Rapid Transit on the same tracks, it would be desirable to reduce the need for so many trains. This would be accomplished by increasing the overall speed of the Commuter line so that a single service every 25 minutes could be operated, with possibly one additional limited stop train per day. Newtonville, West Newton and Auburndale stations would be closed and replaced by Turnpike buses. North Grafton station would not be built since it would be

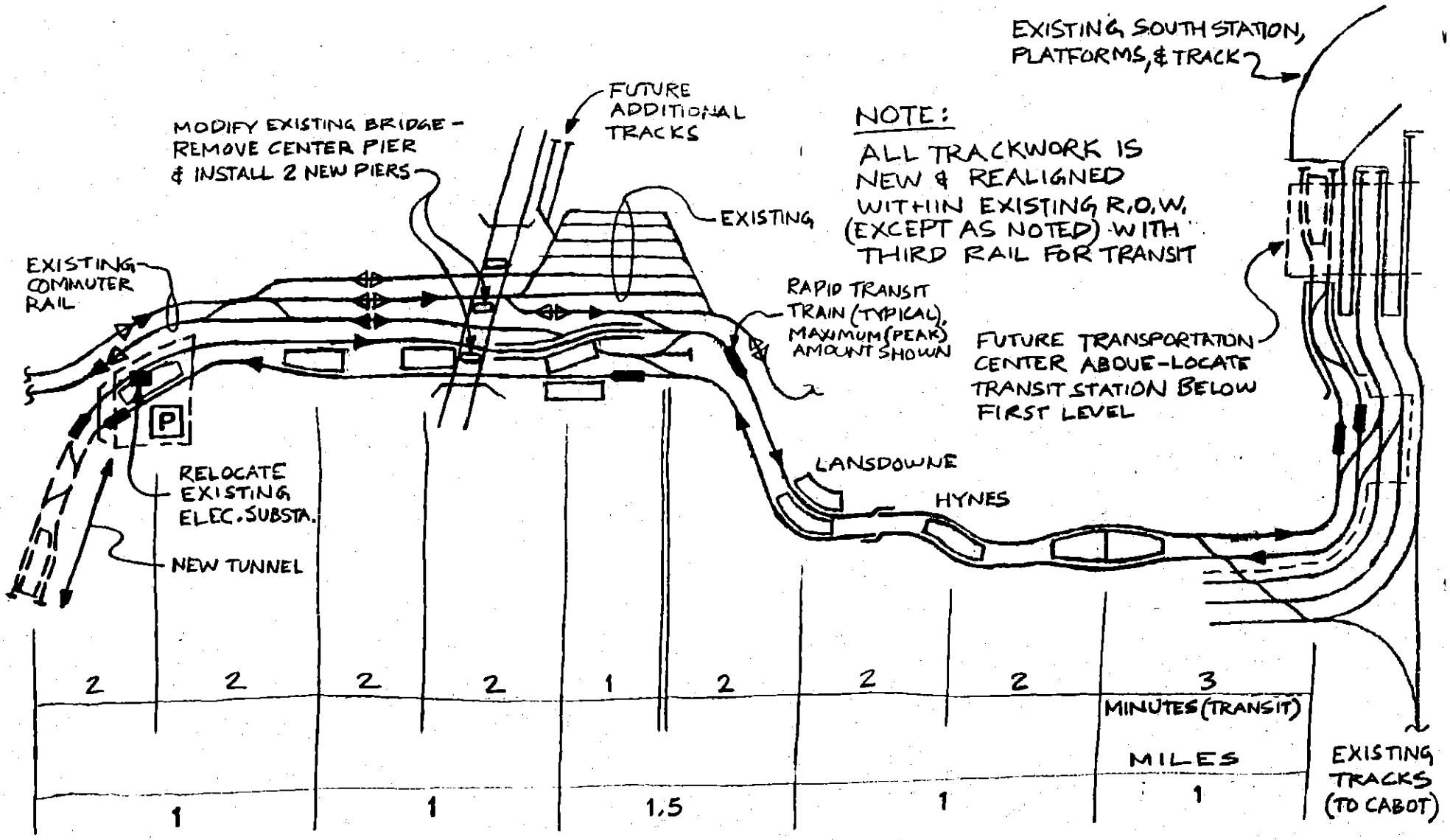
lightly used. The lines maximum speed would be increased from 60 mph. Trains would be bi-level, maximum length, with possibly two engines.
To further reduce the need for trains on the Worcester Line, the existing branch to Marlborough, would be reopened. This would provide a more direct route to Cambridge and North Station from the west, keeping passengers off the central transit lines. It would create a high frequency, high capacity service to a large new station which would be built in Waltham at 128. And, it would put less trains into South Station which is near capacity.

West Corridor Rapid Transit Funding Initiatives

- Provides low cost Green Line Supplement - Other alternatives require major tunneling parallel to Green Line only to reduce peak hour load
- Provides Brighton Corridor Service - preferable to existing bus or reopening light rail
- Reduces Brighton Center Turnpike bus, local bus and B Line peak requirements, and eliminates all Midday, evening and Saturday Turnpike buses
- Provides new concrete track for Framingham Line and high level platforms
- Provides increased service at Yawkey Station (Kenmore), sought by residents due to development
- Reduces future bus purchases for more capacity in Corridor - Rail cars more economical
- Compliance with Clean Air Act

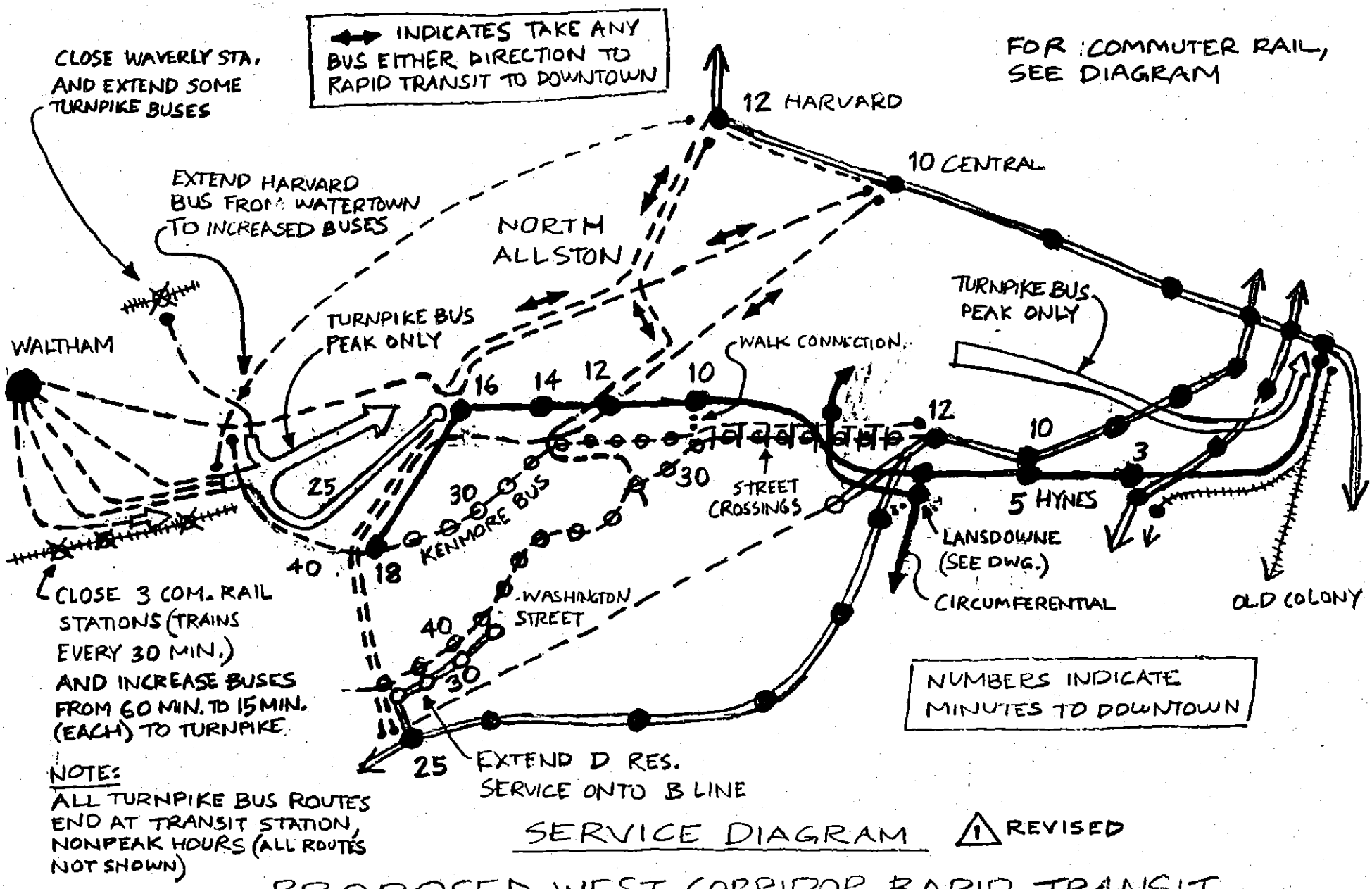


PROPOSED WEST CORRIDOR RAPID TRANSIT



PROPOSED WEST CORRIDOR RAPID TRANSIT TRACK PLAN

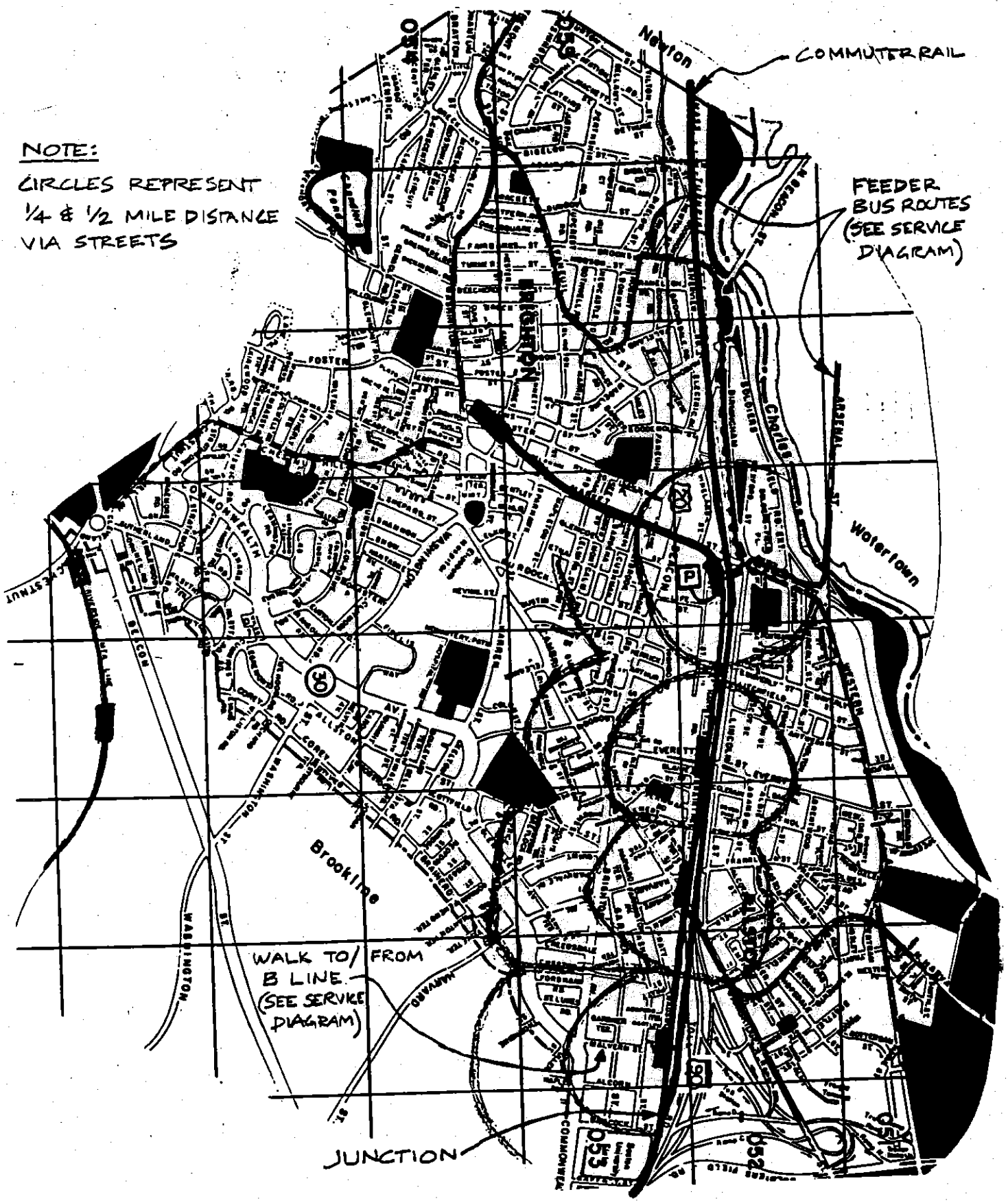
NOT TO SCALE



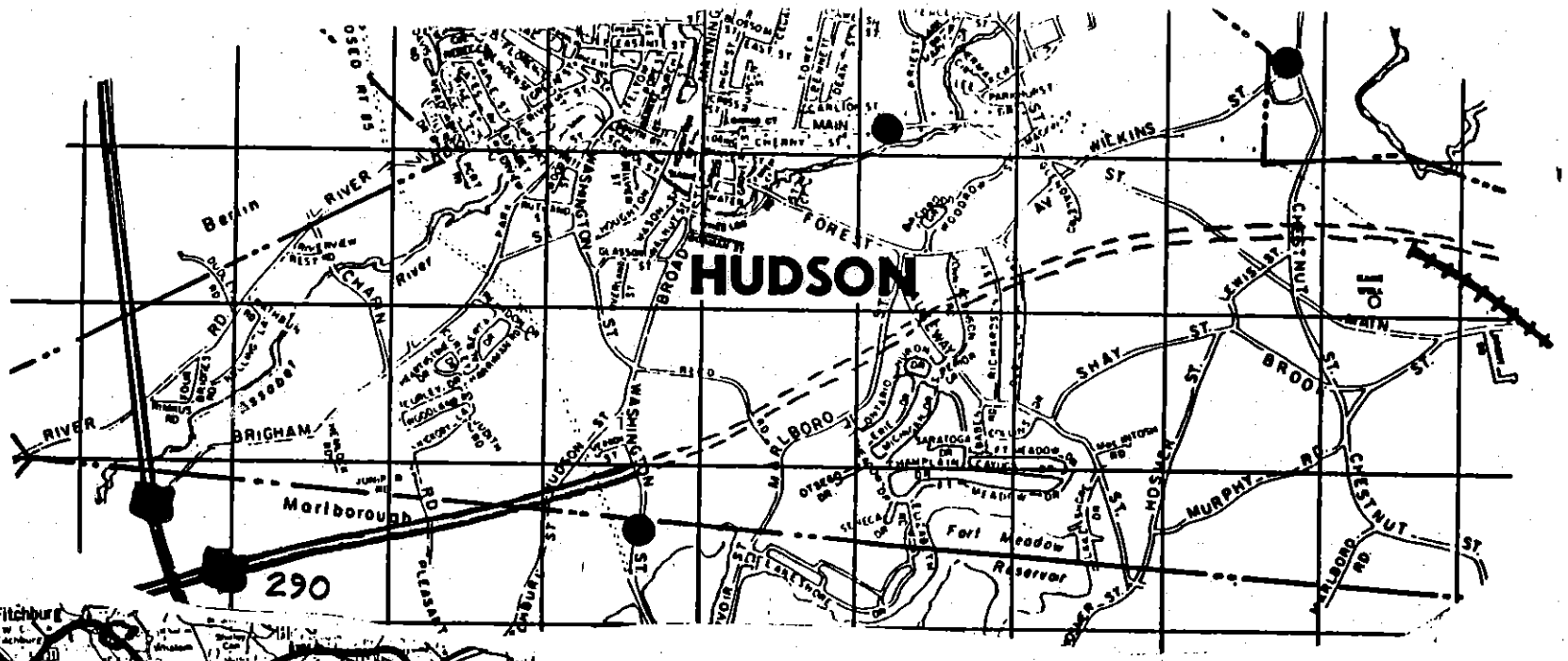
SERVICE DIAGRAM ⚠ REVISED

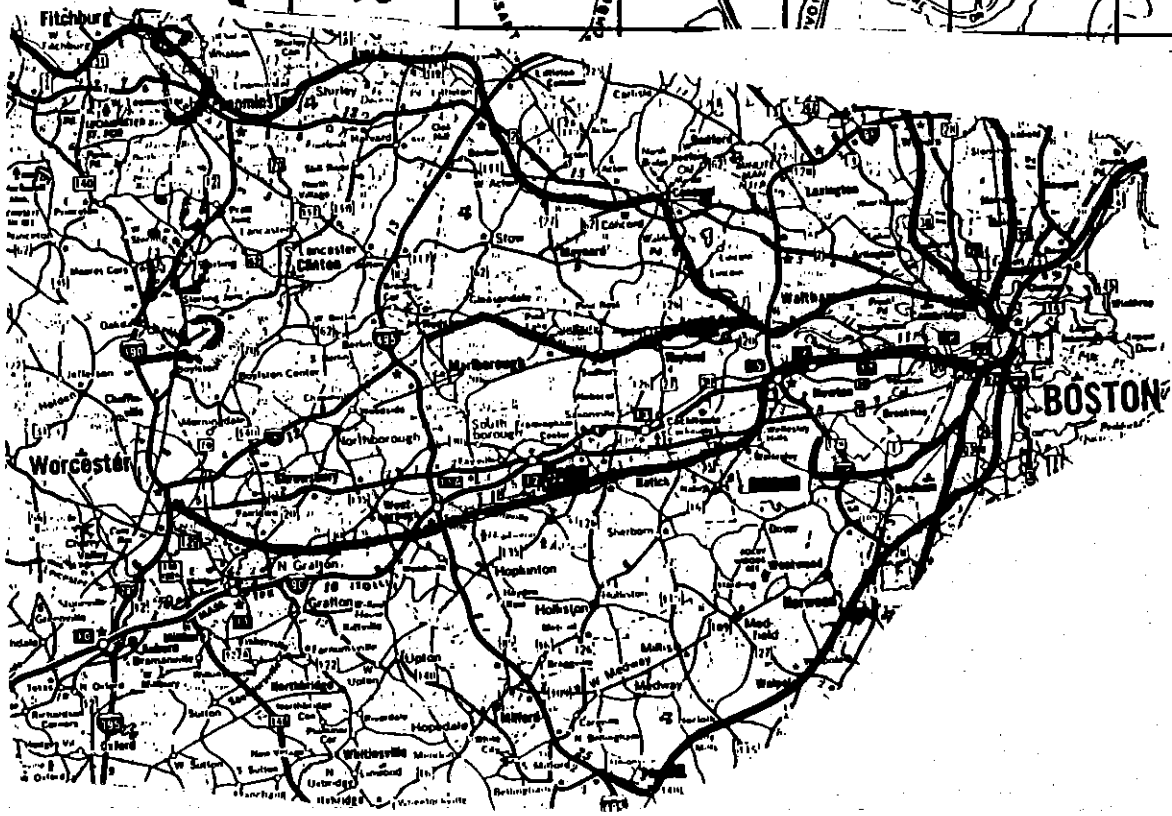
PROPOSED WEST CORRIDOR RAPID TRANSIT

PROPOSED WEST CORRIDOR RAPID TRANSIT



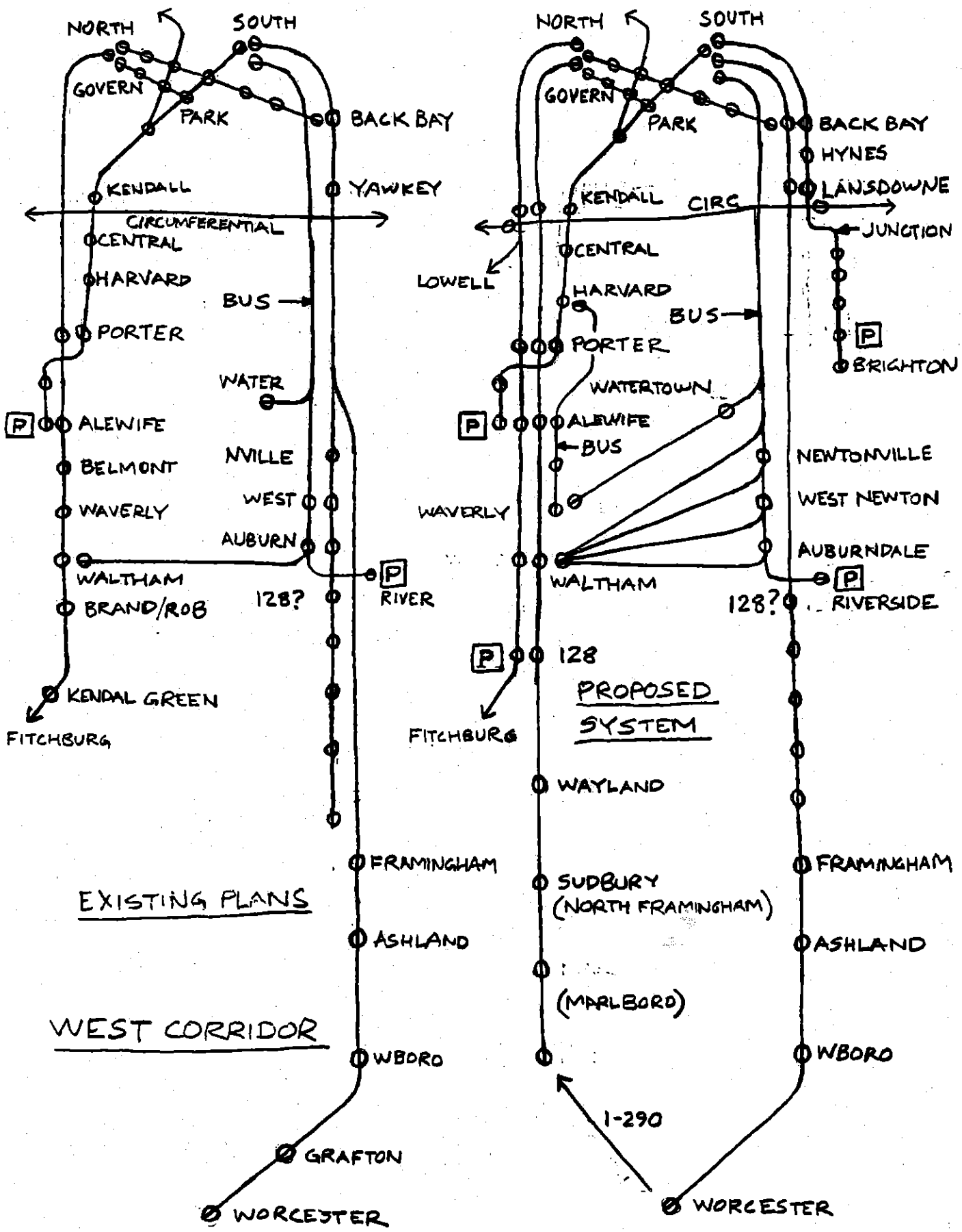
WEST CORRIDOR - PROPOSED MARLBOROUGH BRANCH

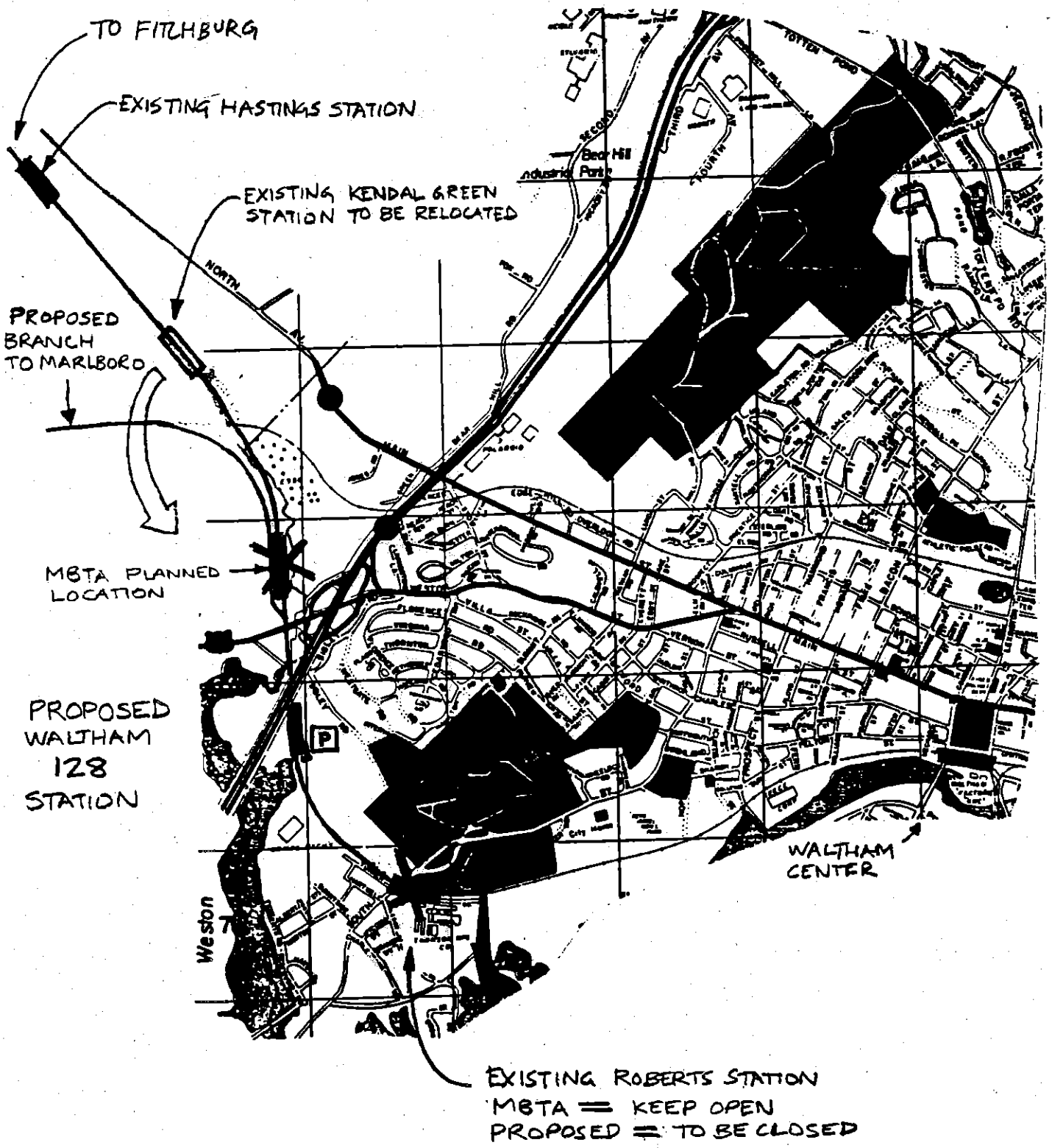




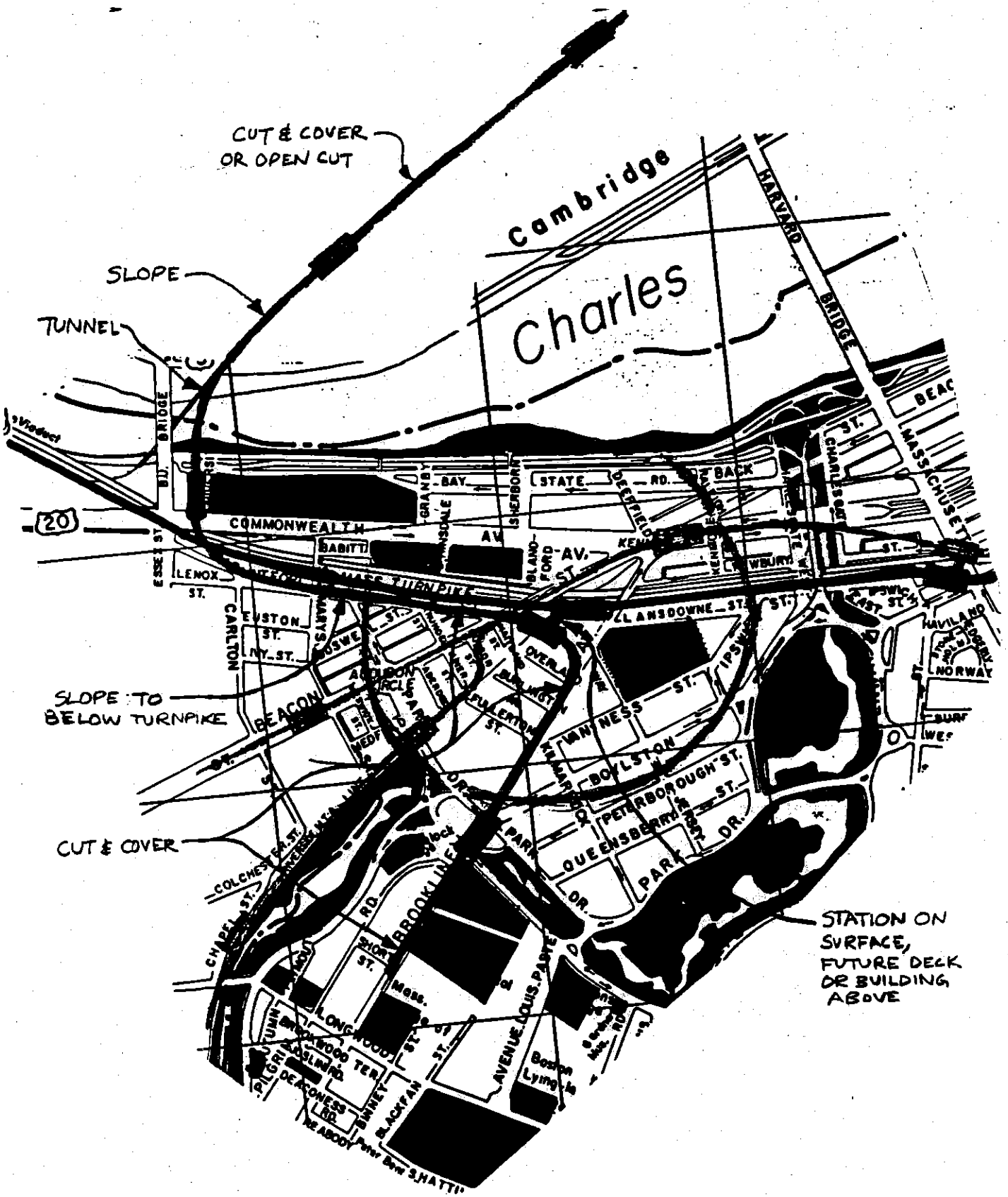
CONNECT NEW RAIL LINE TO I-290 BY:

- EXTENDING I-290 ON PLANNED ALIGNMENT
- EXTENDING RAIL LINE ON I-290 ALIGNMENT
- COMBINATION OF NEW & EXISTING STREETS


NORTH
SOUTH
GOVERN
PARK
BACK BAY
KENDALL
YAWKEY
CIRCUMFERENTIAL
CENTRAL
HARVARD
BUS
PORTER
WATER
P
ALEWIFE
NVILLE
BELMONT
WEST
WAVERLY
AUBURN
WALTHAM
P
RIVER
128?
BRAND/ROB
KENDAL GREEN
FITCHBURG
EXISTING PLANS
FRAMINGHAM
ASHLAND
WEST CORRIDOR
WBORO
GRAFTON
WORCESTER
NORTH
SOUTH
GOVERN
PARK
BACK BAY
HYNES
LANSDOWNE
KENDALL
CIRC
JUNCTION
CENTRAL
LOWELL
HARVARD
BUS
PORTER
P
BRIGHTON
WATERTOWN
P
ALEWIFE
BUS
NEWTONVILLE
WAVERLY
WEST NEWTON
AUBURNDALE
WALTHAM
P
128?
RIVERSIDE
P
128
PROPOSED SYSTEM
FITCHBURG
WAYLAND
FRAMINGHAM
SUDBURY
(NORTH FRAMINGHAM)
ASHLAND
(MARLBORO)
WBORO
I-290
WORCESTER



WEST CORRIDOR- PROPOSED MARLBOROUGH BRANCH



WEST CORRIDOR RAPID TRANSIT/CIRCUMFERENTIAL CONNECTION

Bring your ideas about commuting to a Transportation Town Meeting

Present them •In a short (five-minute) talk •On a map •In a written proposal
•By filling out and submitting the following questionnaire •All of the above

1. *What town do you live in?* NEEDHAM
What town do you work or go to school in? BILLERICA
What other locations do you frequently travel to? BOSTON

2. *What means of transportation do you use to commute to work or school?* CAR

3. *Are there alternative means of transportation available for these trips? What are they?* NO REALISTIC ALTERNATIVE
Comments? A CIRCUMFERENTIAL TROLLEY/RAIL LINE ALONG 128 W/ CONNECTIONS TO RADIAL LINES AND LOCAL VANS TO KEY INDUSTRIAL PARKS AND MALLS SHOULD BE BUILT.

4. *What could be done to improve **your** commute? (by either highway or transit)*
Low-cost improvements

Major capital investments CIRCUMFERENTIAL RAIL LINE ALONG RT. 128 FROM BRAINTREE TO WOBURN

New ways to travel

5. *What could be done to improve transit service to Boston?* TIE RADIAL LINES TO CIRCUMFERENTIAL LINE
Low-cost improvements

Major capital investments EXTEND GREEN LINE (RIVERSIDE BRANCH) BEHIND HIGHLAND AVE TO NEEDHAM INDUSTRIAL PARK/ RT. 128

6. *What could be done to improve transit service in the suburbs?*
Low-cost improvements

Major capital investments CIRCUMFERENTIAL RAIL ALONG RT. 128

If you are unable to attend a Transportation Town Meeting, please send your ideas to:
Commuting in a New Century, Central Transportation Planning Staff, 10 Park Plaza, Suite 2150, Boston MA 02116-3968

2. Selected Public Comments Reprinted from the Primary Phase 1 Volume for Legibility

The following comments were difficult to read in the primary Phase 1 report, because of photocopying, and are therefore reprinted here:

#42 - [unsigned]
#48 - [unsigned]
#53 - [unsigned]
#58 - Robert H. Glotzer
#67 - Thomas Raphael
#69 - Douglas Stewart
#72 - Benjamin Beckwith
#85 - Clark Frazier

Bring your ideas about commuting to a Transportation Town Meeting

Present them •In a short (five-minute) talk •On a map •In a written proposal
•By filling out and submitting the following questionnaire •All of the above

1. *What town do you live in?* Walpole Center
What town do you work or go to school in? Dover Center & Natick Center
What other locations do you frequently travel to? Downtown Boston

2. *What means of transportation do you use to commute to work or school?*
Boston - Commuter rail

3. *Are there alternative means of transportation available for these trips? What are they?* no alternative available to Dover or Natick
Comments? I live in Walpole Center (1 block from Town Hall) very convenient to commuter rail and 34E bus

4. *What could be done to improve your commute? (by either highway or transit)*
Low-cost improvements
Rte. 27 radial bus service
Major capital investments

New ways to travel

5. *What could be done to improve transit service to Boston?*
Low-cost improvements

Major capital investments

6. *What could be done to improve transit service in the suburbs?*
Low-cost improvements
Increase frequency of commuter rail during day; increase Saturday service, especially Christmas season
Major capital investments

If you are unable to attend a Transportation Town Meeting, please send your ideas to:
Commuting in a New Century, Central Transportation Planning Staff, 10 Park Plaza, Suite 2150, Boston MA 02116-3968

Commuting in a New Century
CTPS
10 Park Plaza, Suite 2150
Boston MA 02116-3968

My husband works in Waltham @ Rte 128 & the Pike

Much of the existing transit seems to be oriented towards the center of Boston and it's difficult to go radially.

Comment #42

Comment #48

RECEIVED 10-29-91

October 27th 1991

TO: MBTA
North Shore commuter improvements,
Comments for public hearing,

October 29th 1991,Lynn MA

This is in response to request for comments concerning improvements to the north shore commuter rail service;

PA Berthee Salem At the Salem depot;PA service:

1) provide PA service to alert waiting passengers of delays in train service.

II. Handicapped access and safety; handicapped access to the salem depot for persons without a car was poorly planned, unsafe, etc. for the following reasons;

1) the handicapped ramp (for boarding the train) was installed to the north of the Salem depot, the furthest and most distance point from the main street. HC persons traveling to the station without a car,(eg via wheel chair) have to cross a distance of an extra 1/3 mile just to reach this remote handicapped ramp. THe MBTA should place the ramp to the south of the station ((closer to street and sidewalk access). This would reduce reduce the distance the handicapped would have to travel by 1/3 mile.

2) The area north of the station is a remote area that is frequently vandal ridden. It is an unsafe area for the handicapped. It would be safer to have the ramp located to the south of the station and closer to the main street where it can more easily be monitored by police.
Solution; move the HC ramp at, or to the south of the depot.

III. General public access to the Salem depot, Pedestrians;
Because of the HC ramp being installed to the north of the station, the trains now stop 1/3 mile up from the depot.
Pedestrians arriving from the west of the station now have to walk down a one-way street for 1/3 mile to reach the first train car. This is a dangerouse situation for walkking pedestrian at nilghtand/or icy road conditions).

IV Waiting area for passengers; Becasue the HC ramp was placed to the
it north of the station the trains no longer stop at the depot , but to the north of the depot. Temporaly shelters for waiting passengers have been have been installed in this area but they provide inadequate or no protection from the elements. Because this is a remote area the "shelters" become quickly vandal ridden and un useable. It is also dangerous place for women passengers traveling at night to wait.

Solution; see III above.

THe MBTAs argument to all of the above is that they will in the future be constructing a new station garage , but nothing will change to imporve the above) The existing depot is less than 5 years old and they already have to make major changes(?) How much condfidence can we have (based on their current decisions) that things won't get worse?

cc; MA Handicapped affairs office
Mayor, Salem
Boston Herald, Boston, Globe
Salem Evening newspaper.

Bring your ideas about commuting to a Transportation Town Meeting

Present them •In a short (five-minute) talk •On a map •In a written proposal
•By filling out and submitting the following questionnaire •All of the above

1. *What town do you live in?* Attleboro
   What town do you work or go to school in? Boston
   What other locations do you frequently travel to? Cambridge
   I travel all over Green Line
2. *What means of transportation do you use to commute to work or school?*
   Commuter Rail
3. *Are there alternative means of transportation available for these trips? What are they?* NO
   Comments?
4. *What could be done to improve **your** commute? (by either highway or transit)*
   Low-cost improvements
   Attleboro Train home between 5:35 & 6:20
   45 minutes is a long time to wait at "rush hour"
   Major capital investments
   Have service on Sundays (South side has no service, North side does discriminate
   New ways to travel
   I travel to Boston on Saturdays-Sundays
   1) In and out by Commuter Rail
   2) In by train/back by car - in by car back by train
5. *What could be done to improve transit service to Boston?*
   Low-cost improvements
   Also for people traveling to and from Jamaica Plain extending trolley service to Forest Hills
   Major capital investments
   Regular Maintenance
   Where practical increasing some off-peak bus service
6. *What could be done to improve transit service in the suburbs?*
   Low-cost improvements Research - ask the public
   Crosstown Bus Routes e.g. Arlington to Watertown etc.

   Major capital investments
   Regular Maintenance, Reasonable Schedules (Frequency), Safety, (More police not just on the Orange Line) - Bus schedules

If you are unable to attend a Transportation Town Meeting, please send your ideas to:
Commuting in a New Century, Central Transportation Planning Staff, 10 Park Plaza, Suite 2150, Boston MA 02116-3968

Comment #58

DIRECT RAPID TRANSIT SERVICE FROM LOGAN INTERNATIONAL AIRPORT TO DOWNTOWN BOSTON VIA A HARBOR TUNNEL -- A PROPOSAL

This proposal is submitted as public commentary to the Central Artery Project Supplementary Environmental Impact Statement (SEIS).

BY ROBERT H. GLOTZER
(August 16, 1990)

The Author intends this proposal to be that of a private citizen, and in no way to reflect the position of any public or private body, authority, company, political party, or trade union with which he may be affiliated.

The lack of adequate non-highway ground transportation to and from Logan International Airport from the City of Boston and the metropolitan area is a critical economic issue for the Commonwealth of Massachusetts. As surface access to Logan Airport becomes more constrained every year, the economic value of Logan to Massachusetts, the City of Boston, and the New England Region is diminished. Highway routes to and from Logan are often virtually frozen for hours at a time, even in off-peak commutation periods. (On Easter Sunday of 1988, a dry and sunny day, two and one half hours were required to go from Logan Airport to Downtown Boston through the Sumner Tunnel.) These conditions affect the reliable movement of freight and commercial shipments to airport terminals; shipments which are just as vital to the economic health of the region as the reliable surface movement of passengers and employees to Logan Airport and its associated Air transport industries.

In the next two decades, metropolitan Boston will experience a level of public construction without precedent in modern times. Among the proposed public works are new sports stadiums and arenas, a solid waste disposal facility for the City of Boston, the clean-up of the Boston Harbor, and the development of the Fan Pier Area.

Foremost among the planned public works is the construction of the Third Harbor Highway Tunnel and the depression of the present Central Artery. The Third Harbor Highway Tunnel is intended to provide relief for automobile

traffic in the trans-Harbor corridor from Downtown Boston to Logan International Airport and the North Shore. The Third Harbor Tunnel also recognizes Logan as the largest traffic generator in the region by formally linking the airport to the national interstate highway system.

The Depression and widening of the Central Artery is designed to relieve traffic on the streets of the Central Business District and Downtown residential neighborhoods. The revision of the Central Artery reflects the enormous growth of the central business district, and the parallel growth of both local and regional automobile traffic.

Like the tunnel-artery project, the Green Line to Logan project recognizes Logan Airport as the largest traffic generator in the region by linking the Logan International Complex directly to the subway grid of the metropolitan area and by providing relief for airport-oriented passengers in the Downtown and Trans-Harbor Corridors. The Green Line to Logan project recognizes new configuration of the Central Business District by furnishing direct "one seat, one fare" service to Logan Airport. Like the Central Artery, the Green Line to Logan proposal also affords traffic relief to the Central Business District and to downtown neighborhoods. In addition, the Green Line to Logan project potentially affords substantial relief for airport oriented passengers during construction of both the Third Harbor Tunnel and the depression of the Central Artery.

Conventional wisdom holds that "Yes, transit improvements in the newly configured downtown and in the Trans-Harbor Corridor are necessary and inevitable--but only after the completion of the tunnel-artery project." The Green Line to Logan project takes a different view, saying: "Without additional non-highway transit relief for airport-oriented passengers, the successful and timely completion of the tunnel-artery project may be doubt. With transit relief in the Logan-Boston Corridor, the resulting relief for highway traffic will expedite construction of the Tunnel and the Artery in a timely manner."

Studies of passenger origins to Logan Airport by the Central Transportation Planning Staff (CTPS) have repeatedly shown that substantial numbers of Logan-bound passenger trips originate in the Central Business District (CBD) of Boston (including the Waterfront, Financial and retail areas, the Back Bay, Cambridge, and the Medical Center areas), and the Western and Northwestern suburbs. (Figure I-A & I-B; Figure II-A & II-B.) While these areas are served by numerous MBTA rail and rapid transit lines, none of them provide direct "one-seat" service from the Logan passenger terminals to the CBD generators of airport oriented trips.

The physical boundaries and sheer mass of the Central Business District of Boston have evolved in a configuration unforeseen a decade ago. The CBD has crossed the Charles River into the Kendall Square area of Cambridge. (Figure III.) The

expansion of the CBD continues to the south of the traditional financial and business areas, crossing the Fort Point Channel and enveloping the former warehouse area of South Boston.

Current Plans for Improved Airport Ground Access

The Commonwealth of Massachusetts is preparing to extend the Blue Line from the present Bowdoin Street terminal under Cambridge Street at the Saltonstall Building (from Blossom Street, adjacent to the present Holiday Inn) to a new connection below the present Red Line Charles Street station. (Figure IV.) The Cambridge Street extension for the Blue Line affords a desirable new connection with the Red Line but cannot provide Rail Rapid Transit Service directly from Logan Airport to the newly configured central business district of Boston; the Back Bay, the Waterfront, the Financial District, Government Center, or the Medical area.

A PROPOSAL FOR GREEN LINE RAIL TRANSIT ACCESS TO LOGAN AIRPORT

At present, a trip to Logan Airport from the Back Bay (or points west) requires two transfers. The first transfer is from the Green Line to the Blue Line at Government Center. In practical terms, the transfer at Government Center means debarking from a Green Line Light Rail vehicle, walking down several flights of stairs to the Blue Line (usually with luggage and parcels), and boarding a Blue Line train to Airport Station. (Blue Line trains presently have no luggage racks for airport-bound passengers with suitcases and parcels.) At

Airport Station, passengers must either climb more stairs or use a narrow escalator to reach the Mezzanine Level. Airport bound travelers with their luggage regularly get in the way of North Shore Commuters; a constant source of friction on Blue Line trains. At the Mezzanine Level, passengers must then board a shuttle bus (the third vehicle of the trip) to reach the appropriate airline terminal. Trips to Logan Airport from the Financial District (State Street and Government Center Stations) still require the same transfer to the shuttle bus at Airport Station. It is not surprising that only six percent of Logan passengers take rapid transit to the airport, given these inconveniences inherent in the present rail transit environmental. (Figure V.)

Logan Public Transportation Infrastructure

The Blue Line is the only MBTA Rapid Transit route across the Boston Harbor. (No MBTA bus routes currently serve Logan.) This line utilizes the smallest (in terms of width, length and height) rolling stock of any MBTA Transit Line, reflecting its conversion from a Green Line style street car subway some 60 years ago. Of all four MBTA Rail Transit operations, only the rolling stock of the Green Line and the Blue Line can be used in a joint operation to afford a through connection to Logan Airport. Both vehicles share common track gauge, common traction voltage, and essentially the same "clearance

envelope", due to similar tunnel architecture. (Figures VI-A, VI-B, VI-C.)

The Green Line serves the Back Bay, the Hines Auditorium, the new Hynes Auditorium, dozens of hotels and colleges; and provides the sole MBTA transit connection to Route 128 (at the Riverside Terminal in Newton). The Green Line alone directly serves the perimeter of the affluent western suburbs and office parks along Route 128 that also generate significant numbers of airport-bound passenger trips.

Blue Line stations serve Government Center (Government Center Station), the Financial District (State Street Station), and the new and expanding Waterfront Business District (Aquarium Station) before crossing beneath the Harbor to East Boston and the northern suburbs. The Financial District is now generally considered to include both the Waterfront and the new developments across the Fort Point Channel in South Boston. Both of these areas have many large new hotels and tens of thousands of square feet of new office and commercial space that are strong generators of airport-bound passenger trips for business and commercial travelers.

THE GENERAL PLAN FOR GREEN LINE RAPID TRANSIT TO LOGAN AIRPORT

The existing Green Line can be connected to the planned Blue Line terminal at a new "Charles Circle Under" station, via a "Cut and cover" tunnel under Charles Street, from a turnout at the main Green Line at Boylston and Charles Street South. (Figure VII.) The proposed Charles Street connecting tunnel to

the new Blue Line "Charles Circle Under" Terminal will begin near an unused incline in the Green Line tube (approximately 300 feet east of the present Arlington Street Station), where the eastbound Green Line Rail would curve to the left under Charles Street. The eastbound rail would then continue northbound under Charles Street to connect with the new "Charles Circle Under" terminal on the Blue Line. The southbound rail returning to the Green Line from "Charles Circle Under" would rejoin the westbound main Green Line rail by means of a conventional flat junction and turnout.

The new connection at Charles Street and Boylston would allow modified Green Line Light Rail Vehicles (LRV's) to operate over Blue Line rails via the Blue Line Harbor Tunnel into Logan Airport proper. (Figure IX.) In this way, the Financial District, Government Center, the new Waterfront Business District, the new Massachusetts Convention Center Authority Auditorium and Exhibition Hall Complex, and the Back Bay would be provided with direct "one-seat, one-fare, one ride" rail transit service to Logan Airport proper. These areas (along with the western and northwestern suburbs) have or will consistently produce a substantial share of transit mode airport-bound passenger trips.

This project can be achieved without any land taking without the removal of any structures, relieving the construction of a Charles Street connecting tunnel from the

tedious and expensive proceedings of eminent domain, condemnation, or indemnity to property owners.

ROLLING STOCK

Green Line service to Logan Airport can be furnished by appropriately modified Green Line Light Rail Vehicles. (Figure X.) These modifications will include new doors, interiors, power collection equipment, signal gear, and brake system modifications to make Green Line vehicles compatible with the Blue Line operating environment.

POWER SYSTEMS

Both the Green Line and the Blue Line operate on 650 volts of direct current for traction (propulsion) power. Green Line trains use roof-mounted pantagraphs to draw traction current from overhead catenary lines. Blue Line trains use third-rail shoes to draw 650 volts of direct current from the present Bowdoin Street terminal as far as Maverick Square. From maverick Square to Wonderland Terminal, Blue Line trains use pantagraphs to pick up traction power from overhead catenary, much like the pantagraphs used on Green Line Light Rail Vehicles.

Green Line Light Rail Vehicles designated for airport service must be fitted with third-rail shoes for service from the Charles Street connecting tunnel to Maverick Square. Pantagraph shoe compatibility must be assured for LRV's to operate on the cantenary wire of the two lines. Third-rail shoes fitted to Light Rail Vehicles on the Green Line must be

designed to be electrically "dead" when not used in the power collection mode to prevent potential injury to both unauthorized persons on the right-of-way and MBTA operating personnel. Related traction power collection equipment beneath LRV car bodies must also be included in any such "cut-out: circuits for third rail shoes.

Anti-climbers (corrugated street sills mounted at the end of transit car bodies to prevent telescoping in the event of collisions) on LRV's must be modified to match the height of anti-climbers on Blue Line car bodies.

BODY MODIFICATIONS TO LIGHT RAIL VEHICLES FOR AIRPORT SERVICE

The interiors of Green Line Light Rail Vehicles designed for airport service will require some modifications for luggage racks, multi-lingual maps, and signs, etc. In order for Green Line LRV's to use low level platforms on the Green Line and high level platforms on the Blue Line, multi-level boarding steps and matching door hardware will have to be retrofitted on LRV's rebuilt or ordered for airport service. The use of multi-level steps and doors on LRV's and streetcars has long been a practice in Europe. Variable height steps are successfully used on Boeing Vertol LRV's operated in the City of San Francisco. (Figure) In this respect, we are dealing with a proven and familiar technology, one that is available from "off the shelf" sources both in the United States and overseas.

SIGNAL MODIFICATIONS TO GREEN LINE LIGHT RAIL VEHICLES

The Green Line (a Light Rail System that feeds into a Rapid Transit-style subway operation from Kenmore Square to Canal Street via the Back Bay) and the Blue Line (a conventional high platform Rapid Transit operation) employ different signal systems. Blue Line signals feature automatic mechanisms (known as "trip stops") at each signal to prevent trains from passing by red lights. Green Line vehicles will require the retrofitting of "trip valves on each leading power "truck," (the wheel sets at either end of each Light Rail Vehicle,) with related brake line modifications to activate trip stops on Blue Line signals.

ADVANTAGES OF DIRECT GREEN LINE TO LOGAN AIRPORT TO THE MBTA

Disparate classes and sizes of rolling stock have always been an operating problem for the MBTA rapid transit lines. An operating connection between the Green Line and the Blue Line permits the Authority to consider at least some common vehicles for both lines in the future, with attendant economies in operations, procurement and maintenance.

While the Blue Line is the sole MBTA rapid transit route on the north side of the Boston Harbor, it has one route with limited downtown circulation. In contrast, the Green Line has four separate routes, all of which could theoretically operate directly to Logan (from as far as Route 128 at the Newton-Wellesley border), after circulating through the Back Bay, Government Center, and the Financial District.

The City of Lynn has long sought a Blue Line extension to its Business District from the present Wonderland Terminal. An extension to Lynn using Light Rail Vehicles offers potential savings in both construction and engineering.

A joint Green-Blue Line route to Logan via Charles Street relieves pressure on the congested Lechmere-Arlington section of the Green Line. This provides MBTA operations personnel (and MBTA member communities) with more flexibility in both service planning and vehicle utilization. This will be a critical advantage if the presently unused Tremont Street Tunnel is reactivated for revenue service from the South End and Roxbury into the Green Line Central Subway.

Current MBTA bus operations over the Tobin Bridge are often subject to delays due to heavy traffic. A Green Line route across the harbor provides the Authority with upgraded service options for North Shore communities.

THE IMPLICATIONS FOR THE REGIONAL ECONOMY

The construction of the Green Line directly to Logan coincides with the development plans for the new Hines Auditorium and Exhibition Complex currently under construction by the Massachusetts Convention Center Authority. The Green Line extension to Logan would further stimulate economic activity in the metropolitan Boston area. Rapid transit to Logan Airport from the Hines Auditorium area, the Back Bay, the Financial District, and the Waterfront, greatly increases the competitive appeal of the Massachusetts Convention Center Authority's facilities as a site for conventions, exhibitions, and trade fairs. Such events that will attract patrons from not only the New England region and the eastern seaboard but the rest of the United States and Europe as well. The development of the convention, tourist, and hospitality industries is critical for the economic well-being of Eastern Massachusetts to replace jobs once traditionally available in the manufacturing sector. The availability of Rail Rapid Transit from the airport to the Central Business District and the facilities of the Massachusetts Convention Center Authority will also greatly enhance the value of Boston as a Business and Commercial Center.

NEAR TERM ACTIONS NEEDED ADVANCE TO SUPPORT A GREEN LINE EXTENSION TO LOGAN

At this point, this is a proposal that needs to be refined, "fleshed out" with data, and presented in such a way that it can be readily explained and visually displayed to the interest groups and media outlets that will be directly affected by the construction of the Green Line to Logan. These interest groups would include components of the hotel, restaurant and hospitality industries, Air Transport industries, Business Conservation, and Neighborhood groups, the Bay State Labor Council, and the news media. It is safe to say that the academic community of Massachusetts, particularly those institutions involved in urban planning and architecture would be potential supporters of this project.

No large program of public works is "easy." Certainly this is not an "easy" project. To plan it, present it, and execute it will require time, patience and skill. What a direct Green Line to Logan Airport offers, compared to other solutions to the highway transportation situation in the Boston CBD to Logan corridor are substantial immediate economic benefits with far smaller expenditure compared to all other solutions.

Just as the third Harbor Tunnel recognizes Logan Airport as the largest traffic generator in the region by connecting the airport to the interstate highway grid, the Charles Street connector enables MBTA trains from the central business district to use the Blue Line tunnel to gain direct airport

access. The Green Line to Logan proposal also recognizes Logan as the largest regional traffic generator by directly connecting the airport with the regional transit (and commuter rail) grid.

This plan utilizes vehicles and technology that are proven and operational. This plan utilizes a tunnel to cross the Boston Harbor that is already in place, fully amortized, and has much excess capacity. The use of the LRV rapid transit vehicle to enter Logan Airport proper permits physical integration of rail rapid transit into the existing airport environment without expensive new facilities. This advantage brings airport-bound transit passengers as close to the tarmac as is humanly possible with Rail Rapid Transit.

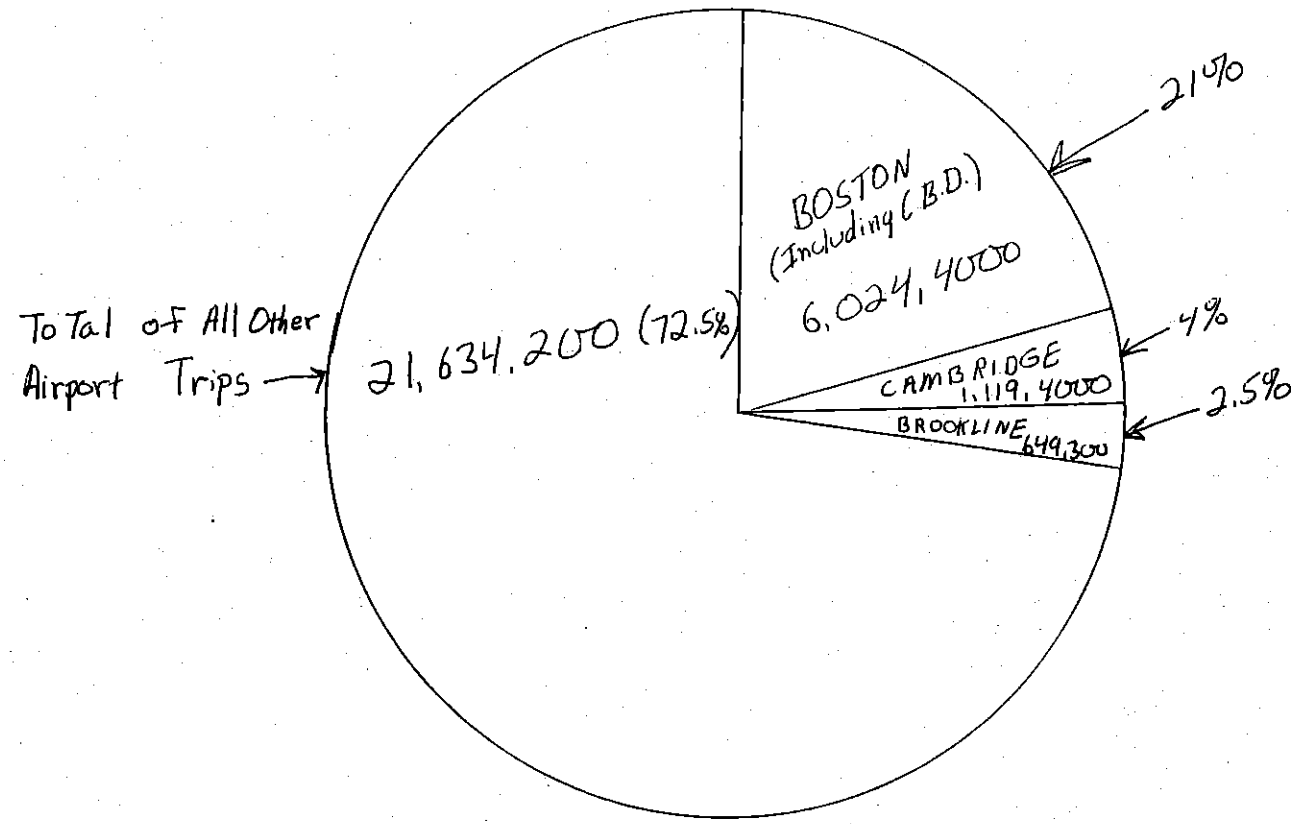


FIGURE I-A

(Source: Report on Logan Airport Travel Study: Coverdale & Colpitts, Consulting Engineers, For Massachusetts Department of Public Works, October, 1972.)

TABLE III

LOGAN AIRPORT TRAVEL STUDY

Mode of Travel by Origin-Destination of Ground Trips To and From Logan Airports

T O T A L

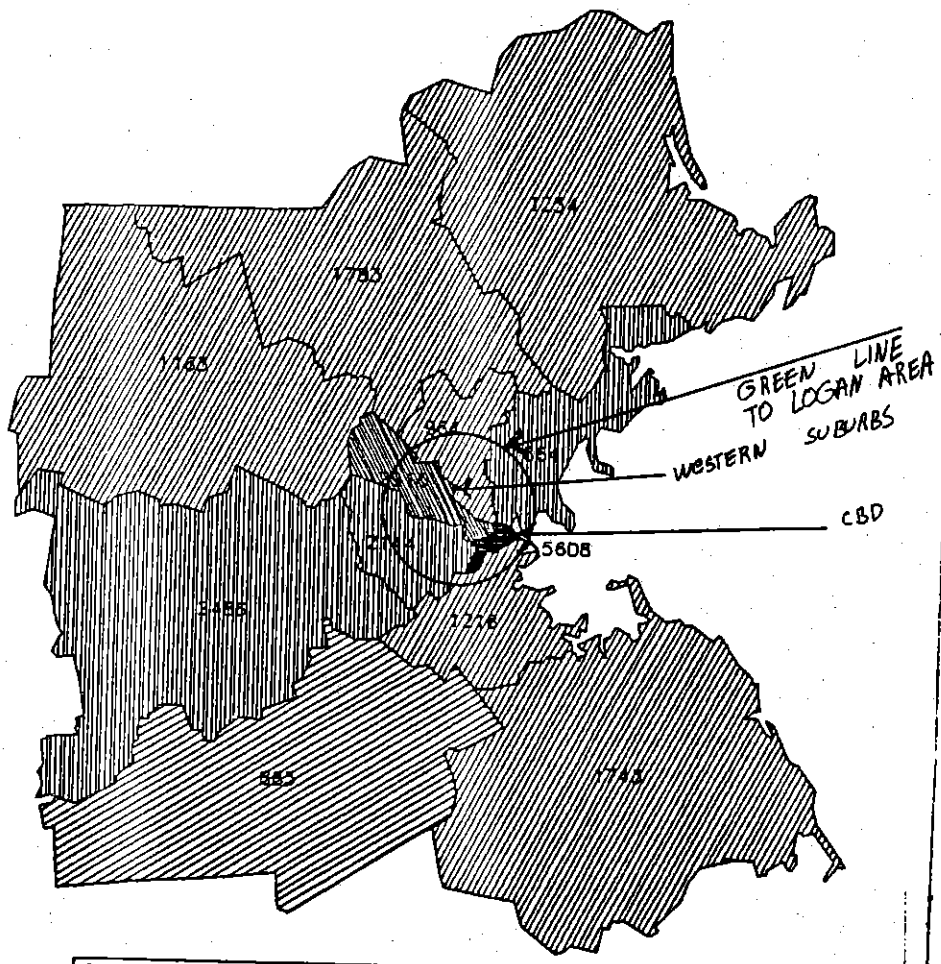
Location	Estimated Annual Trip Volume — To Airport: Car	Rapid Transit	Taxi/Limousine	Other	Total	From Airport: Car	Rapid Transit	Taxi/Limousine	Other	Total	Total Trips: Car	Rapid Transit	Taxi/Limousine	Other	Total
	(Thousands)														
BOSTON															
Boston (General)	71.9	11.4	20.5	6.2	110.0	257.5	37.8	47.0	8.0	350.1	329.4	[illegible]	67.5	14.2	460.1
East Boston	244.4	57.5	28.0	83.0	412.9	334.8	48.9	11.5	75.2	534.8	579.2	106.4	14.5	158.2	907.7
Charlestown	44.0	13.7	8.8	1.7	68.2	17.7	12.6	11.8	.2	42.3	61.7	26.3	20.6	1.9	110.5
Downtown	433.9	187.9	403.4	22.8	1,048.0	419.3	163.7	430.3	39.3	1,052.6	853.2	351.6	833.7	62.1	2,100.6
South Boston	54.4	9.5	15.9	7.7	87.5	53.6	7.0	9.9	.5	71.0	108.0	16.5	25.8	8.2	158.5
Dorchester	229.8	34.3	22.8	2.0	294.9	232.0	33.8	21.5	5.6	294.9	461.8	68.1	44.3	7.5	579.8
Roxbury	82.0	19.4	14.1	.1	115.6	54.0	15.3	16.6	1.1	121.0	136.0	34.7	30.7	1.2	235.6
Mattapan	68.4	15.7	1.7	-	85.8	58.1	13.3	5.0	-	76.4	126.5	29.0	6.7	-	162.2
Hyde Park	63.6	4.4	8.9	-	70.9	90.9	5.7	2.7	-	99.3	154.5	10.1	2.6	-	170.2
Roslindale	73.5	13.9	.6	-	88.0	55.0	16.9	1.7	.8	71.6	128.5	30.8	2.4	.8	157.5
West Roxbury	49.8	1.1	1.0	-	51.9	42.1	.4	.7	.3	43.5	91.9	1.5	1.7	.3	95.4
Jamaica Plain	180.6	66.6	64.8	1.2	313.6	176.8	62.4	69.1	5.0	313.8	357.4	128.5	133.9	6.2	625.9
Brighton	146.3	49.5	18.7	1.5	212.0	134.0	42.9	17.6	3.1	197.6	280.3	92.4	36.3	4.6	409.6
Total	1,728.6	477.5	608.6	26.8	2,839.5	1,938.8	456.3	652.9	139.1	3,089.1	3,667.5	933.8	1,855.9	265.2	6,924.4
Brookline (General)	37.6	9.0	4.1	.2	46.9	84.2	5.3	5.5	.3	100.0	122.5	14.3	9.6	.5	146.9
Inner	164.2	41.4	21.5	1.8	230.5	129.3	39.3	25.4	2.2	196.2	293.5	80.7	46.9	4.0	425.1
Outer	37.0	2.0	4.1	.6	43.9	29.5	1.1	4.2	-	35.0	66.4	3.1	8.4	.6	78.3
Total	238.8	52.4	31.9	2.6	321.7	243.7	45.7	35.1	2.5	327.2	482.5	98.1	64.9	5.1	649.4
Cambridge (General)	85.0	4.7	7.1	.6	98.3	89.4	13.3	12.2	2.3	117.2	174.3	18.0	19.3	2.9	215.5
Inner	181.0	40.8	58.1	6.2	286.1	127.1	37.5	61.0	5.5	232.9	308.1	78.3	119.1	11.7	519.0
Outer	167.0	47.3	41.3	.8	256.4	132.4	34.3	66.1	5.7	238.5	299.4	81.6	107.4	6.5	495.9
Total	433.8	92.8	106.5	7.6	640.8	348.9	85.9	139.3	13.5	588.6	782.8	177.9	245.8	21.1	1,227.4
OTHER NAME.															
Within Route 128															
North East	1,931.3	100.1	30.6	22.4	2,084.4	1,946.5	93.3	41.8	24.1	2,105.7	3,877.8	193.4	72.4	46.5	4,190.1
North West	1,786.3	61.5	48.9	9.8	1,909.5	1,569.9	56.8	61.2	10.9	1,901.1	3,355.7	122.3	104.1	19.4	3,601.0
West	894.0	37.7	51.6	3.1	991.4	809.6	41.4	72.4	18.4	941.8	1,703.6	79.1	127.0	21.5	1,933.2
South West	154.8	4.7	9.7	.8	170.0	156.2	4.0	5.0	1.6	166.8	311.0	8.7	14.7	2.4	336.8
South East	524.7	20.7	9.5	-	554.9	504.3	19.3	16.1	5.6	541.3	1,029.0	40.0	25.7	5.6	1,096.2
Total	5,291.1	224.7	151.3	35.5	5,702.6	5,786.1	214.8	196.5	59.6	5,256.7	11,077.0	439.5	347.9	95.1	10,159.3
Between Routes 128 and 495															
North East	219.9	1.3	2.0	1.1	225.2	238.8	1.9	1.3	2.1	243.5	458.1	3.2	4.2	3.2	468.7
North West	683.6	5.7	12.5	5.9	707.5	677.0	5.7	11.7	4.8	699.2	1,360.6	11.4	24.0	10.7	1,406.7
West	677.4	12.2	10.5	3.8	698.3	664.5	10.8	18.4	10.9	704.6	1,336.9	23.0	28.9	14.1	1,402.9
South West	304.8	4.9	5.3	1.0	316.0	300.9	3.7	6.8	1.0	310.4	605.7	8.6	12.1	2.0	626.4
South East	607.4	8.5	8.8	6.4	691.2	631.8	8.1	5.7	9.6	655.2	1,239.2	16.7	14.5	16.0	1,345.4
Total	2,548.1	32.7	39.0	17.6	2,638.2	2,513.0	30.2	43.9	28.4	2,612.9	5,060.5	62.9	83.9	46.0	5,251.7
Beyond Route 495															
North East	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
North West	11.7	-	.3	-	12.0	12.3	-	.1	-	12.4	24.0	-	-	-	24.4
West	631.9	11.1	22.2	8.7	673.5	601.4	12.6	18.1	15.4	693.7	1,239.3	23.9	40.3	24.1	1,327.6
South West	325.4	4.1	7.2	7.1	335.8	308.7	5.6	5.4	5.9	325.6	634.1	12.7	13.1	13.1	661.4
South East	350.3	9.0	16.0	8.7	384.2	389.2	5.6	9.4	13.3	416.5	739.7	14.6	25.4	22.0	800.7
Total	1,309.3	24.2	45.7	24.5	1,405.9	1,313.6	23.8	33.0	34.6	1,408.2	2,623.1	51.2	78.8	59.2	2,814.1
OUTSIDE NAME.															
Maine	237.3	2.7	6.5	5.9	252.4	232.1	3.5	4.0	8.9	251.5	469.4	6.2	10.5	15.8	503.9
New Hampshire	721.7	6.7	31.9	17.3	777.6	717.7	10.2	35.8	31.0	794.1	1,439.4	16.9	67.1	48.3	1,571.7
Vermont	30.4	1.2	2.3	2.1	36.2	21.7	1.2	2.9	3.5	29.3	52.1	2.4	5.4	5.6	65.5
Connecticut	81.9	.8	.5	.4	83.6	54.1	-	.9	.8	55.8	136.0	.8	1.4	1.2	139.4
Rhode Island	289.7	10.5	86.8	7.1	334.1	273.0	10.9	14.9	12.5	313.3	564.7	21.4	41.7	19.6	647.4
All Other	93.7	8.0	3.6	4.8	84.1	85.4	1.4	3.4	7.0	58.2	180.1	9.4	7.0	11.8	127.3
Total	1,354.7	33.9	71.8	37.6	1,525.0	1,367.0	29.3	61.3	64.7	1,502.2	2,761.7	63.2	133.1	102.3	3,030.2
NO ANSWER (Employees)	7.5	3.5	-	9.4	20.4	7.5	2.3	-	19.3	29.1	15.0	5.8	-	28.7	49.5
TOTAL	12,398.8	930.1	1,028.6	259.0	14,616.9	12,368.6	894.6	1,156.0	362.0	14,810.4	24,790.1	1,824.6	2,391.8	621.0	29,427.3

FIGURE I-B

(Source: Report on Logan Airport Travel Study: Coverdale & Colpitts, Consulting Engineers, For Massachusetts Department of Public Works, October, 1972.)

COVERDALE & COLPITTS

Logan Access Trips by Zone of Origin
1987 Average Weekday

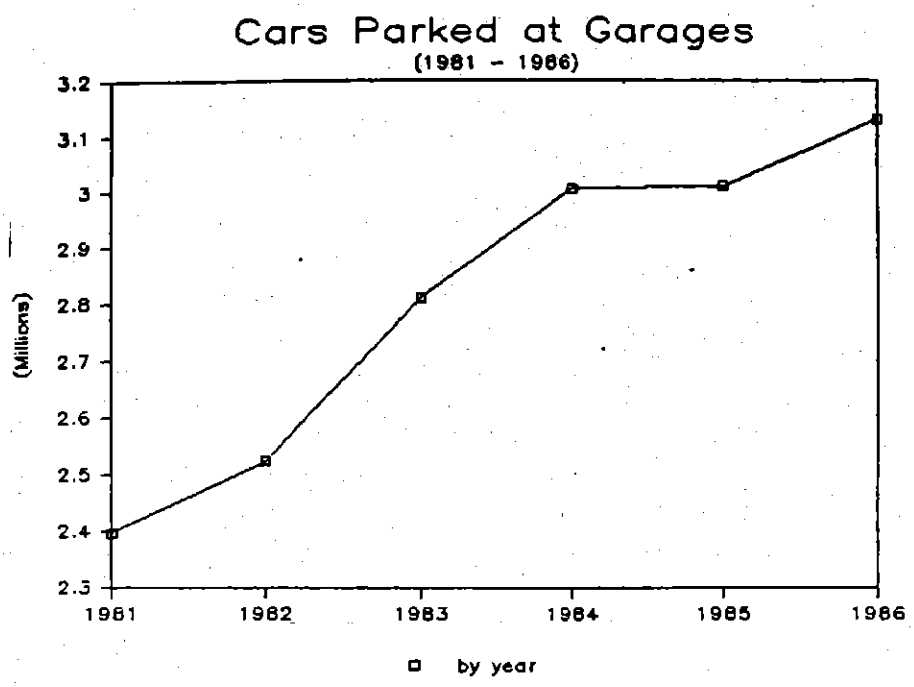


TOTAL = 30,111

other Mass.: 2,463
Maine, N.H., Vt.: 3,054
Conn., R.I.: 517
Elsewhere: 51

FIGURE II-A

(Source: Air Passenger Travel Study, Charles River Associates, For Massachusetts Port Authority, 1987.)



	TOTAL VEHICLES PARKED	% CHANGE	TOTAL PASSENGERS	% CHANGE	PARKED VHEICLES per PASSENGER
1981	2,398,884		14,827,68		0.16
1982	2,525,515	5.3	15,867,722	7.3	0.16
1983	2,800,000	10.9	17,848,797	12.8	0.16
1984	3,009,726	7.4	19,417,972	9	0.15
1985	3,013,281	0.1	20,448,424	5	0.15
1986	3,133,469	4.0	21,862,718	7	0.14

FIGURE II-B

(Source: Generic Environmental Impact Report: Operation of Logan Airport, Massachusetts Port Authority, 1987.)

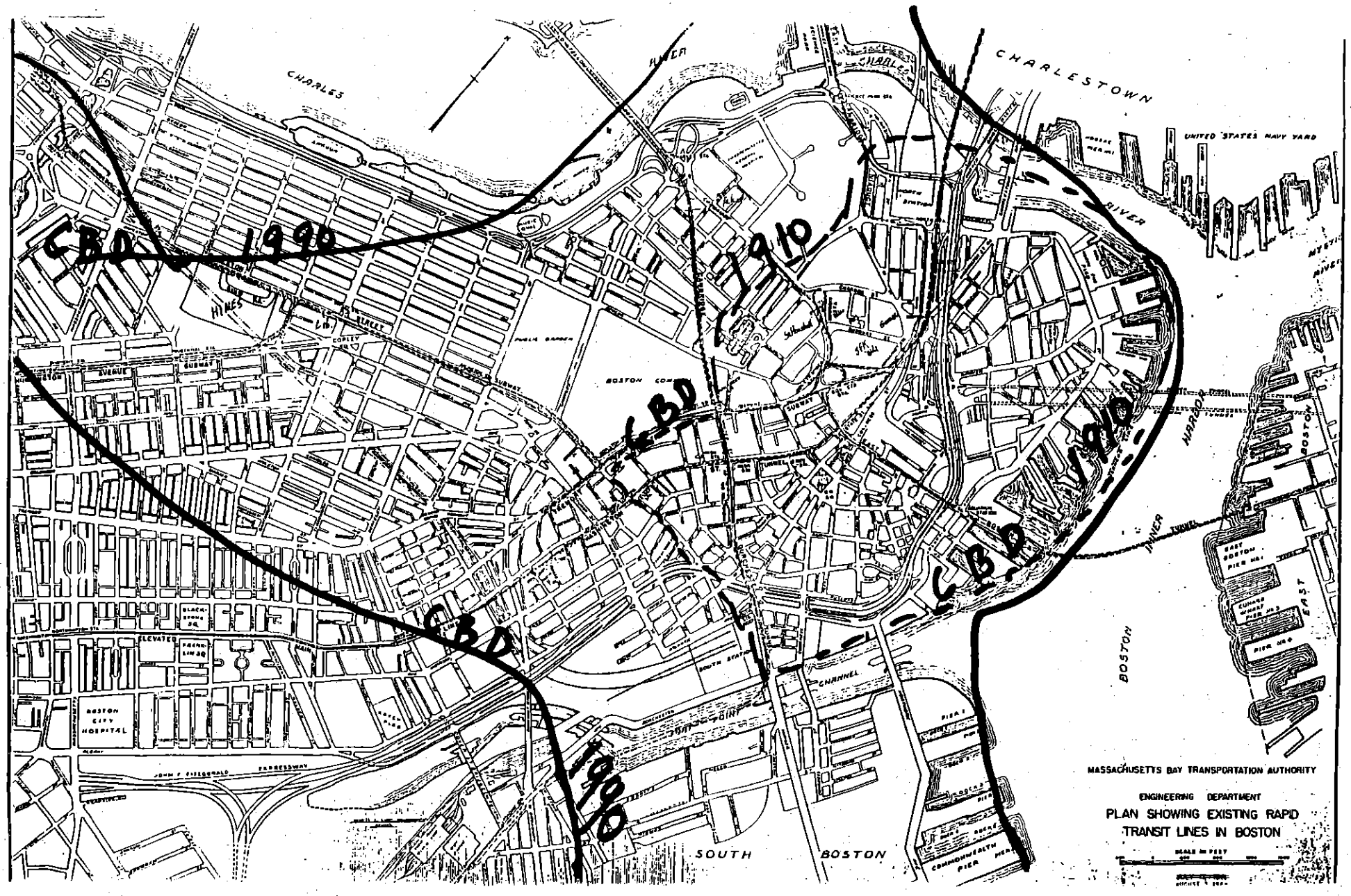

CHARLES
RIVER
CHARLESTOWN
UNITED STATES NAVY YARD
HINES
COPLEY
PUBLIC GARDEN
BOSTON COMMON
SUBWAY
AVENUE
ELEVATED
BOSTON CITY HOSPITAL
JOHN F. FITZGERALD EXPRESSWAY
SOUTH STATION
CHANNEL
SOUTH BOSTON
COMMONWEALTH PIER
EAST BOSTON PIER NO.1
CUNARD STREET PIER NO.3
PIER NO.4
INNER HARBOR
BOSTON
EAST
CBD 1990
CBD 1910
CBD 1910
CBD
CBD
1980
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
ENGINEERING DEPARTMENT
PLAN SHOWING EXISTING RAPID TRANSIT LINES IN BOSTON
SCALE IN FEET

FIGURE III

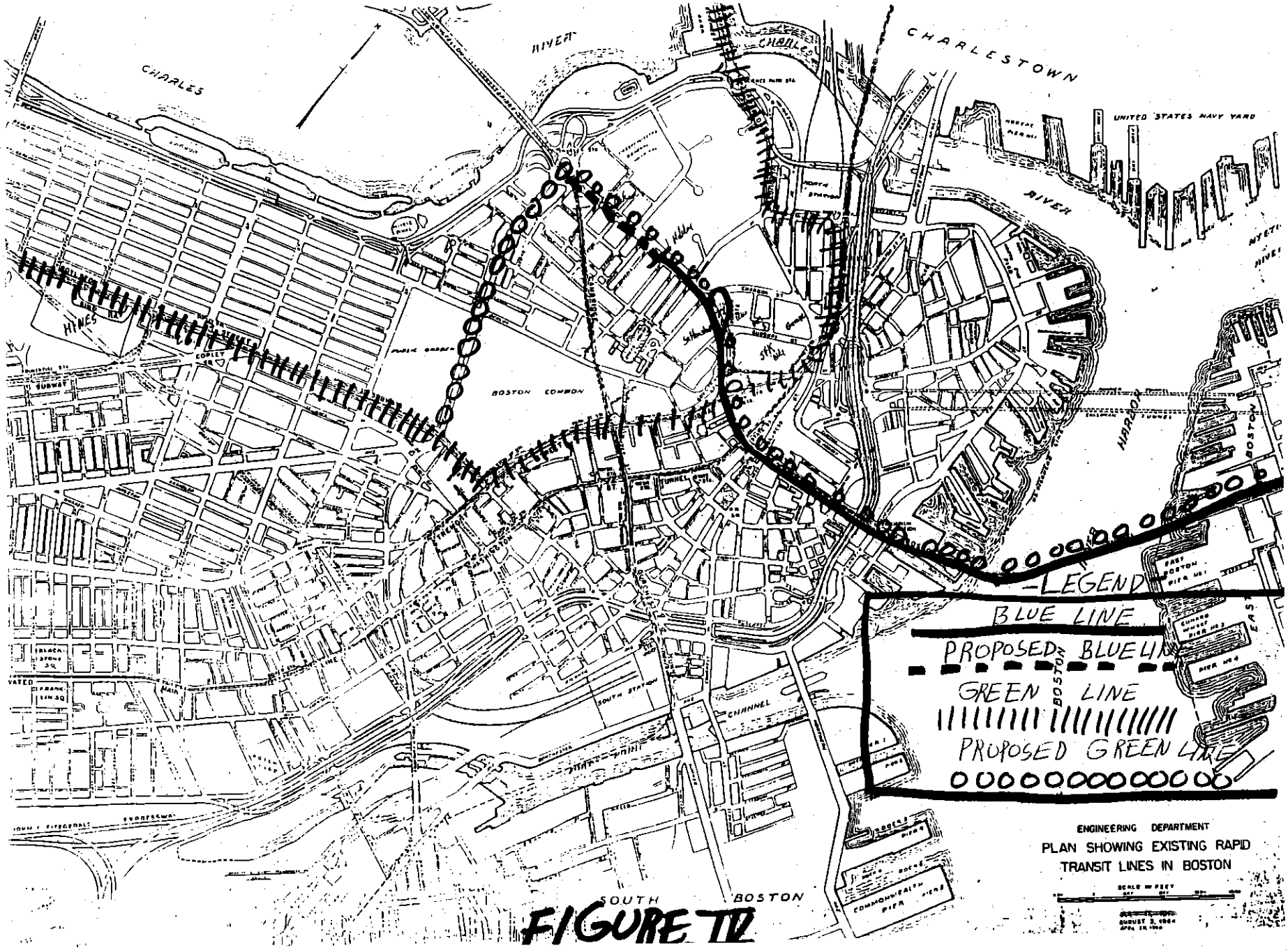

CHARLES
RIVER
CHARLESTOWN
UNITED STATES NAVY YARD
RIVER
HINES
COPLEY
BOSTON COMMON
HARBOR
BOSTON
EAST
SOUTH STATION
CHANNEL
SOUTH BOSTON
COMMONWEALTH PIER
LEGEND
BLUE LINE
PROPOSED BLUE LINE
GREEN LINE
PROPOSED GREEN LINE
ENGINEERING DEPARTMENT
PLAN SHOWING EXISTING RAPID
TRANSIT LINES IN BOSTON

FIGURE 12

1984 Passenger/Employee Mode Choice to Logan

Access Mode	% Passengers	% Employees	% Total
MBTA	5.5	9.0	6.6
Bus/Limo	9.2	0.3	6.5
Taxis	17.5	0.7	12.4
Car Rental	12.3	0.0	8.6
PRIVATE AUTO			
Parked	22.0	87.6	41.9
Dropped Off	33.4	0.0	23.3
Other	0.0	2.4	0.7
Total	100.0%	100.0%	100.0%

A more up-to-date mode split will be available when the results of the 1987 Logan Passenger Survey are available.

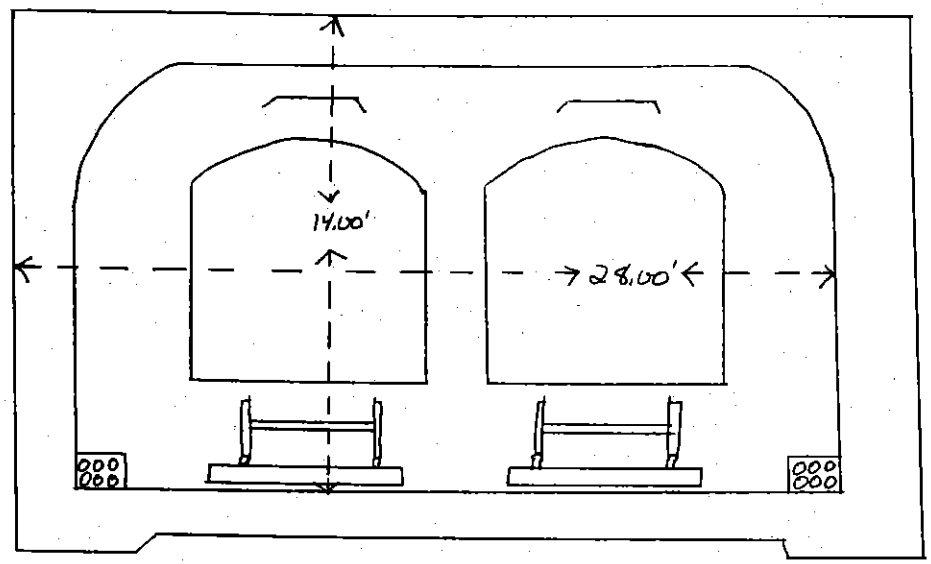
Passenger/Aircraft Operations

Year	Total Passengers	Annual % Change	Total Aircraft Operations*	Annual % Change
1981	14,827,684	--	251,793	--
1982	15,867,722	7.0%	244,468	-2.9%
1983	17,848,797	12.5%	288,098	17.8%
1984	19,417,972	8.8%	318,959	10.7%
1985	20,448,424	5.3%	349,518	9.6%
1986	21,862,718	6.9%	363,995	4.1%

(*does not include general aviation operations)

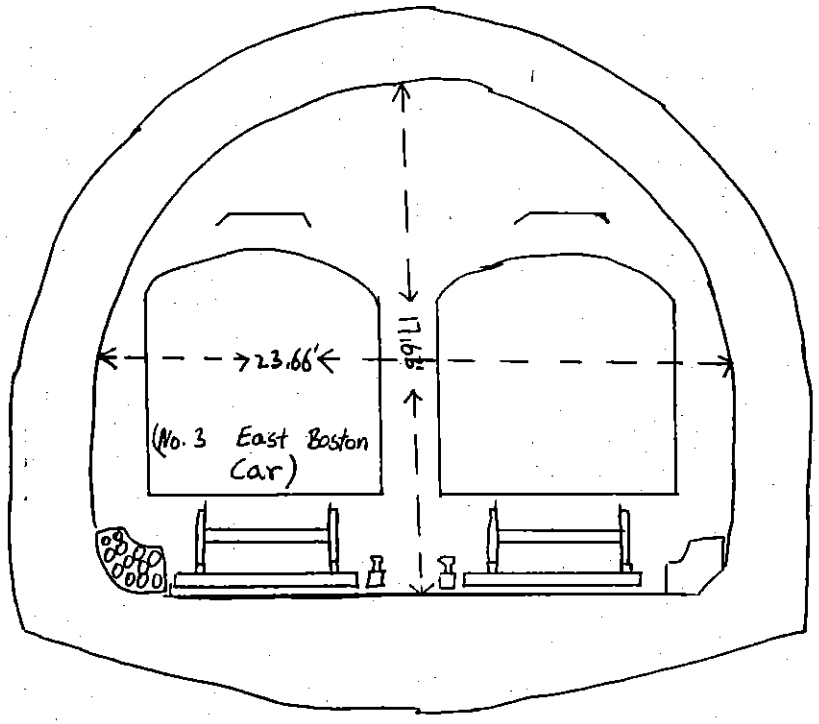
FIGURE V

(Source: Generic Environmental Impact Report: Operation of Logan Airport, Massachusetts Port Authority, 1987.)



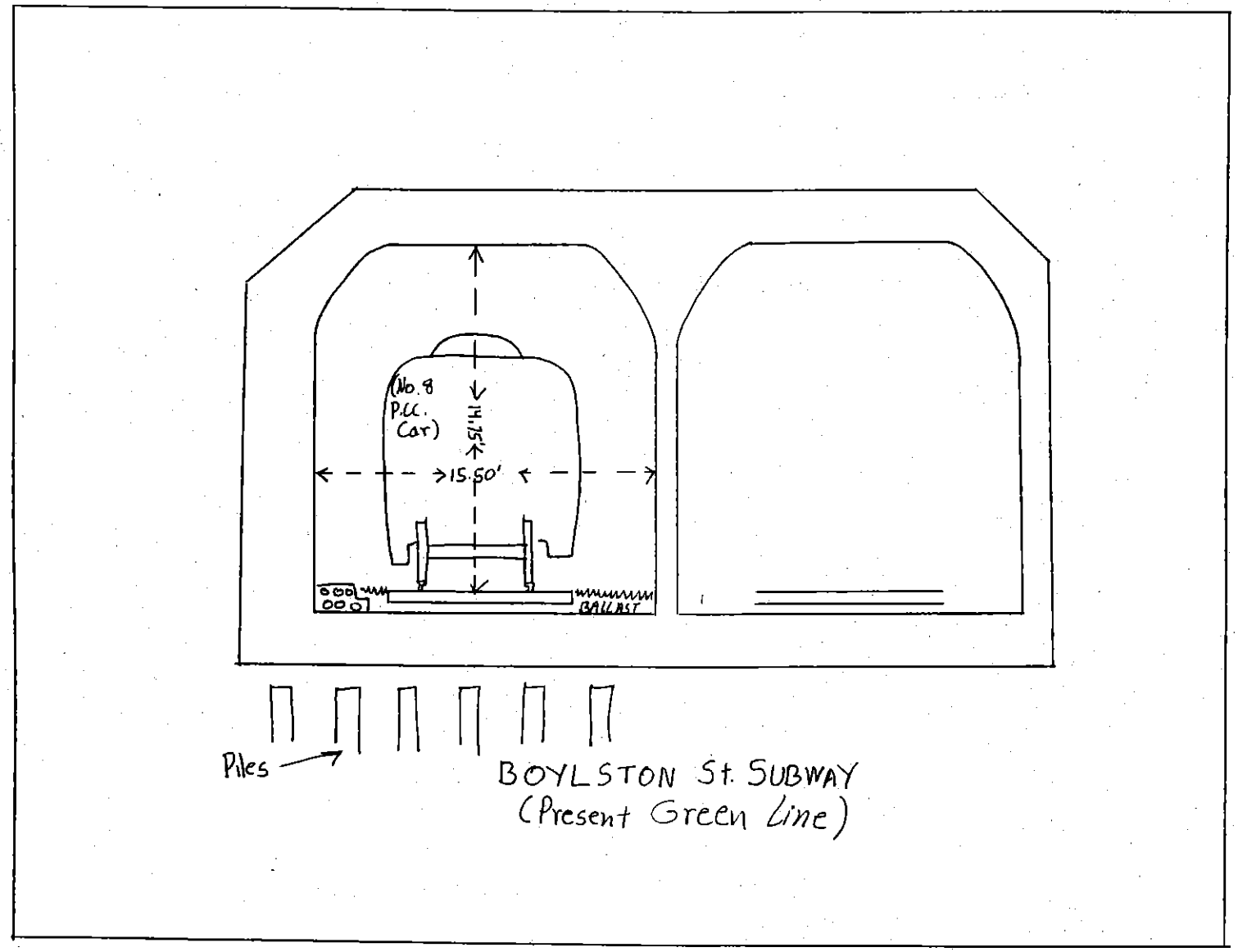
EAST BOSTON TUNNEL EXTENSION
Gov. Center to Bowdoin.

VI-A



EAST BOSTON TUNNEL

VI-B


No. 8
P.C.C.
Car)
14.75'
15.50'
BALLAST
Piles
BOYLSTON St. SUBWAY
(Present Green Line)

VI-C

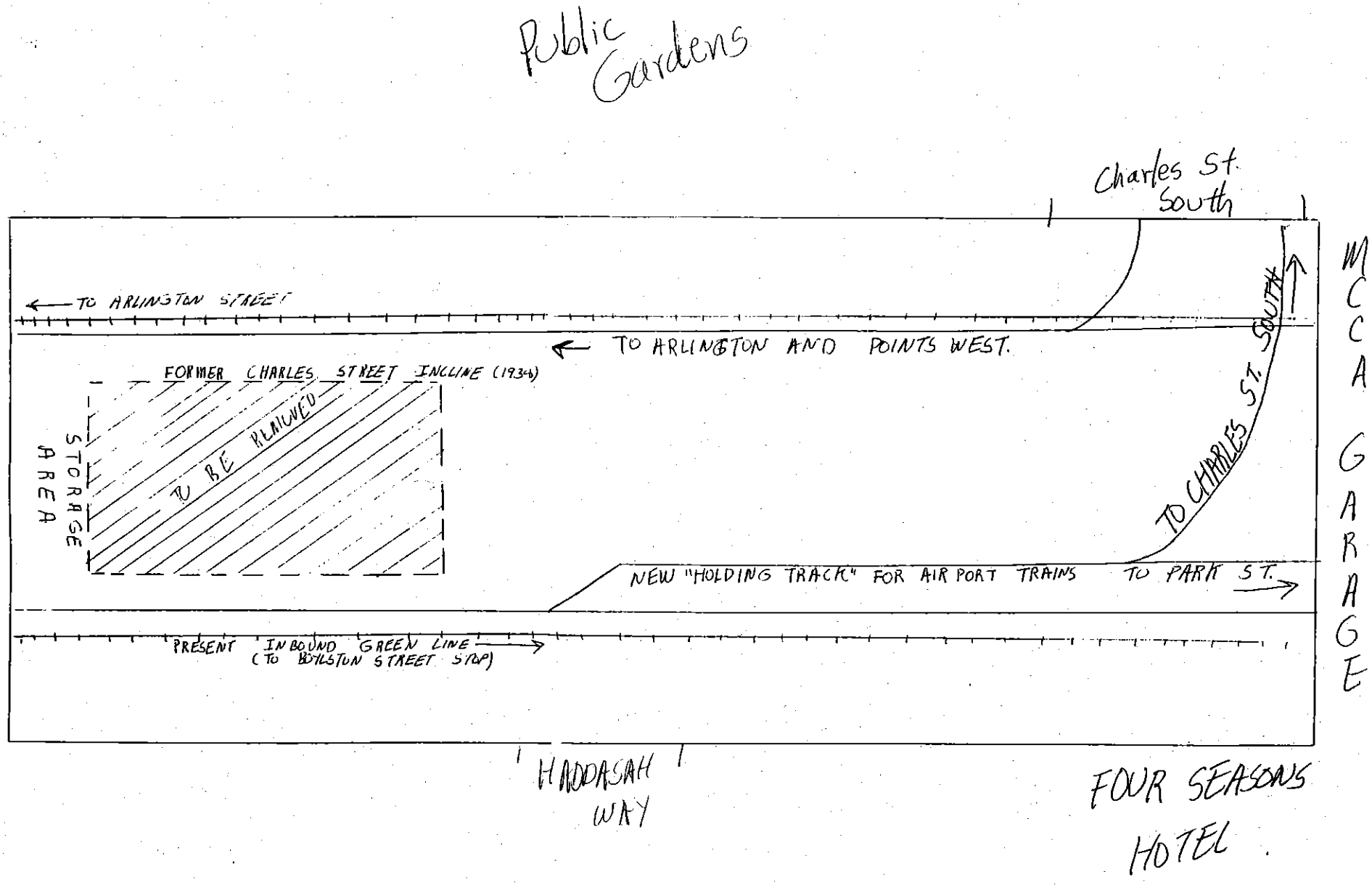

Public Gardens
Charles St. South
TO ARLINGTON STREET
TO ARLINGTON AND POINTS WEST.
FORMER CHARLES STREET INCLINE (1934)
TO BE PLANNED
STORAGE AREA
TO CHARLES ST. SOUTH
NEW "HOLDING TRACK" FOR AIR PORT TRAINS
TO PARK ST.
PRESENT INBOUND GREEN LINE
(TO BOYLSTON STREET STOP)
MCCA GARAGE
HADDASAH WAY
FOUR SEASONS HOTEL

FIGURE VII

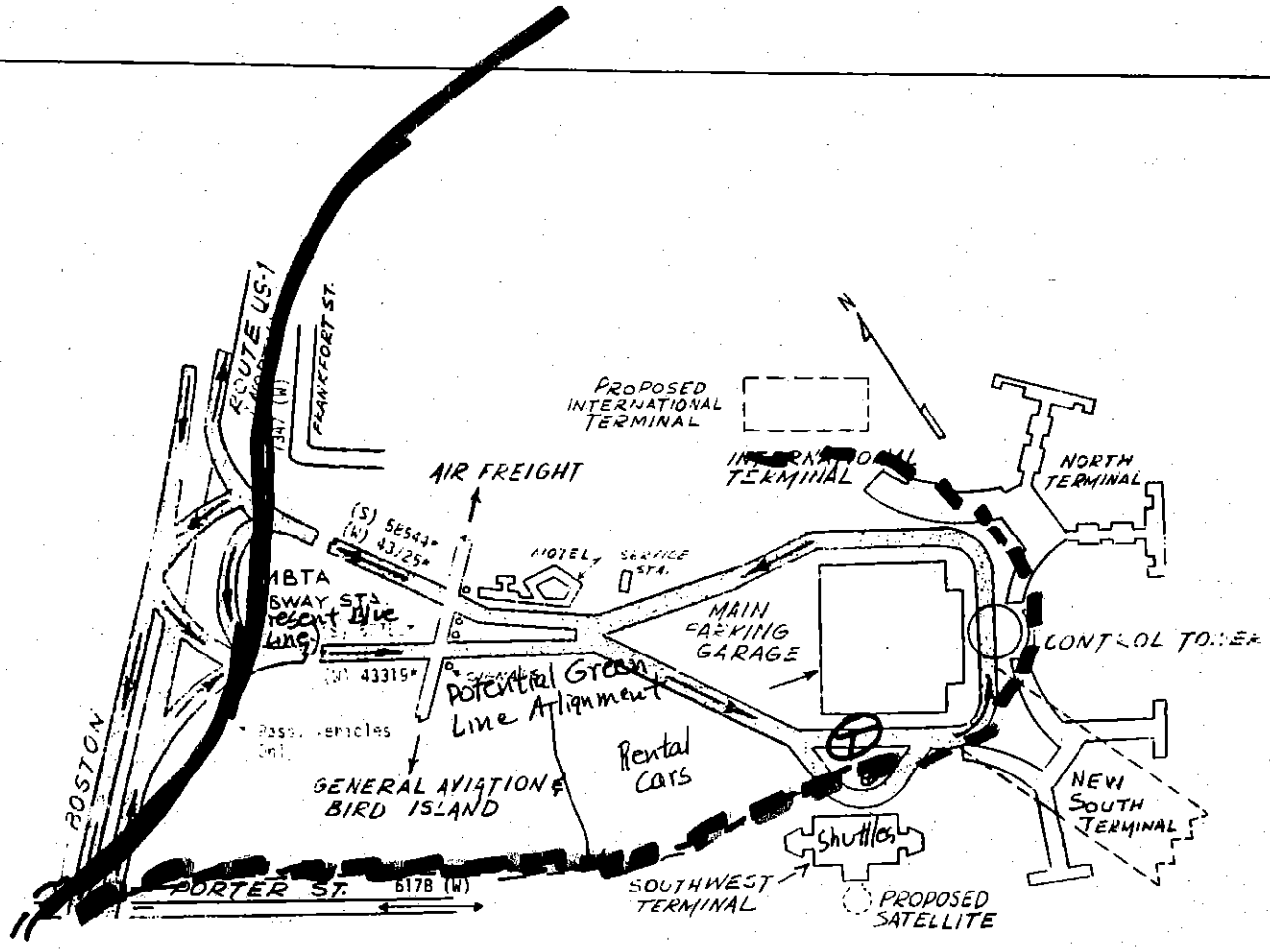

ROUTE US-1
FRANKFORT ST.
PROPOSED INTERNATIONAL TERMINAL
AIR FREIGHT
NORTH TERMINAL
MOTEL
SERVICE STA.
MAIN PARKING GARAGE
CONTROL TOWER
Potential Green Line Alignment
Rental Cars
GENERAL AVIATION & BIRD ISLAND
NEW SOUTH TERMINAL
Shuttles
SOUTHWEST TERMINAL
PROPOSED SATELLITE
PORTER ST.
BOSTON

FIGURE IX

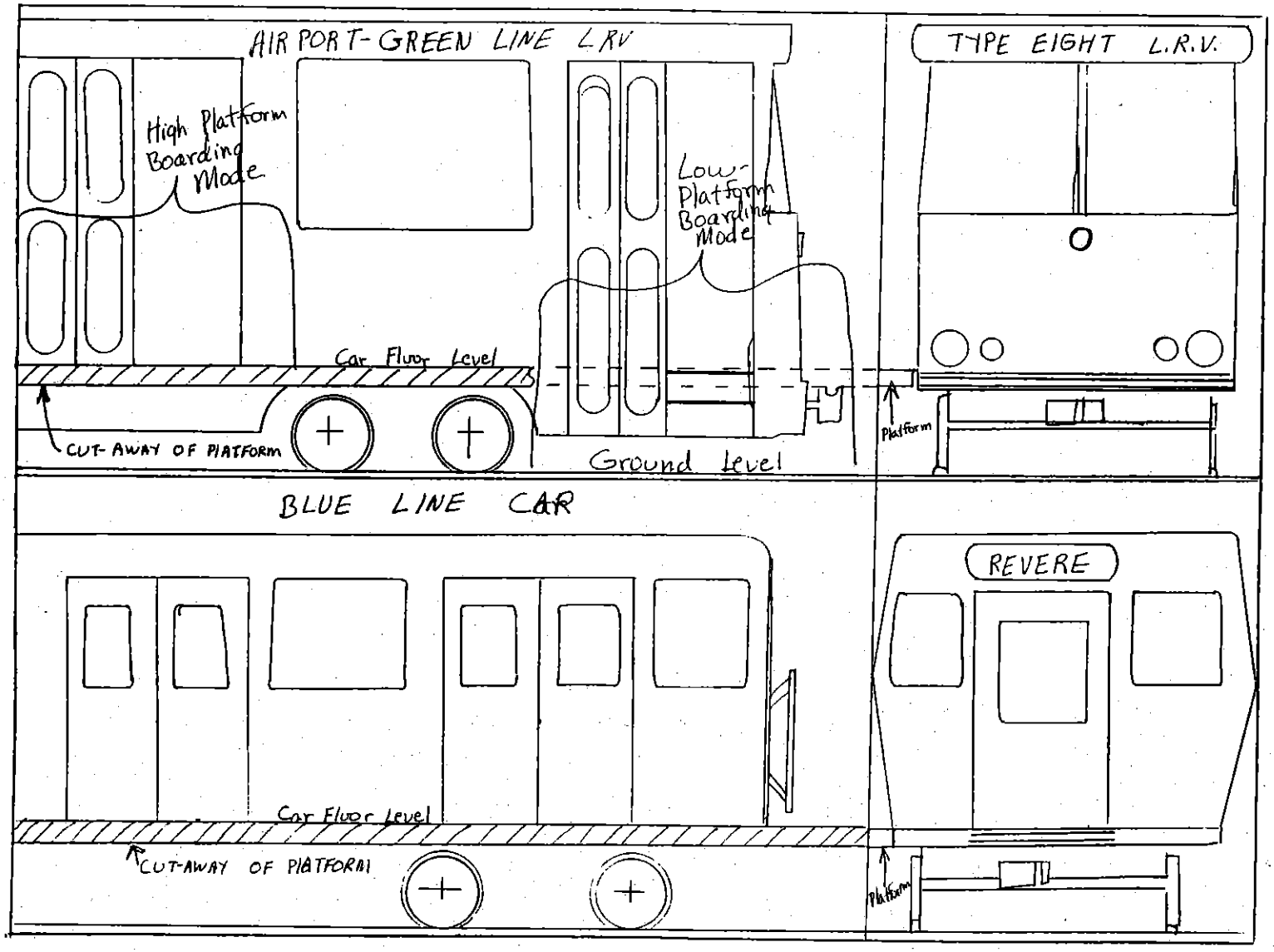


FIGURE X - Boarding Configurations of Transit Cars.

FIGURE XI

(Light Rail Transit Symposium, Anals of the American Academy of Political and Social Science, Washington, D.C., 1984.)

Comment #67

Raphael Associates
90 Grove Street
Winchester MA 01890-3845
617-729-3215

THOMAS RAPHAEL
CONSULTANT - PROFESSIONAL ENGINEER

December 4, 1991

To Commuting in a New Century
CTPS
10 Park Plaza Suite 2150
Boston, MA 02116-3968

Proposal
for a
Major Transit System
via
Elevated Monorails along Median Strips

Introduction

This proposal will require the design and construction of a pioneering new rapid transit system based on monorail cars suspended from an elevated rail system which could be built over and along the median strip of any existing highway.

The system could, as well, go over other rail or transit lines, roads, rivers, parkland, wetlands, forests and even populated areas with minimum land taking, disruption of existing systems or areas, environmental impact and maintenance cost.

The system would be non-polluting quiet and of unimposing structure.

While monorails are not new, this concept attempts to eleminate some of the problems associated with current experiments.

There are three parts to this proposal

1. The System Concept
2. The System Installation
3. The System Design and Construction

The System Concept

The concept envisions an elevated electrified transit system where cars are suspended from and run on the bottom flange of an "I" beam.

The "I" beams would be suspended from crossarms extending on either side of a supporting pylon or between two pylons.

The "I" beam would be covered with an inverted "U" cap to protect the flange rail and the car wheels from the elements as well as muffle sound.

The wheels would be of rubber to run silently and the electric drive motors would also be as quiet as possible. See attached schematic.

The electric system would not polute the air and the "I" beam track would provide no run-off.

There may be a need for bottom stabilizer rail to keep the cars from swinging in high winds and to guide them into terminals

There would be no icing nor snow on the rails to interfer with transit nor need for plowing or salting

COMMONWEALTH OF MASSACHUSETTS
THOMAS RAPHAEL
No. 10477
REGISTERED PROFESSIONAL ENGINEER

IDENTIFICATION AND SECURITY • CHEMISTRY AND ENGINEERING

The System Installation

The system envisions new high strength "I" beams which can span fairly long distances. These beams would be suspended from cross arms supported by pylons. The beams would not cut out light nor be obtrusive.

The pylons would require only a proper foundation, thus there would be minimum of disruption of existing systems, roads or areas.

The pylon system could be built along or over any existing highway, through wetlands, parklands, wooded and even populated areas with minimum land seizure and disruption of surface.

The system could follow the present major highways by going along the median strip passing either over or under existing bridges without any modifications.

The system could span any other rail, transit, highway or waterway without major disruption or interference.

Main new routes could be built in the nearest straight line.

In addition to the "spokes" radiating from the core city, circumferential routes could be built with major transfer terminals at intersecting points.

Terminals would be fairly far apart with large parking garages directly accessible under cover.

An inner-belt system could be built following the originally planned inner-belt circumferential roadway as it could follow over parklands and existing highwaya without disrupting or interferring with either nor require destroying buildings This could connect with the present in-town transit systems

Transit by this system would be extremely fast even without excessive speed due to the distance between terminals.

There would be no need to go into the core city if the monorail system could connect with major terminals of the present in-town systems at some point such as the terminals associated with the inner-belt.

The system could span large areas such as lakes, marshes or harbors by building a suspension system.

The elimination of roadbeds, bridges, tunnels and drainage should make this system more economical to build and to maintain.

The System Design and Construction

No existing system meets all the concepts or requirements of this system therefore there is a need for a major design and engineering program.

It is suggestes that the present airplane and transit system companies be invited to design the cars. They would have to meet the major requirements but they would be free to build their own components.

The "I" beam rail system should be standardized so that any manufacturer's cars could run on it.

The "I" beam rail system should be presented to the Universities and the steel manufacturers for a basic design.

It would be hoped that such a system would become as standard as to the rail system that there would be a high future market all over the U.S. and even the world but that we would pioneer it.

COMMONWEALTH OF MASSACHUSETTS
THOMAS RAPHAEL
No. 10477
REGISTERED PROFESSIONAL ENGINEER

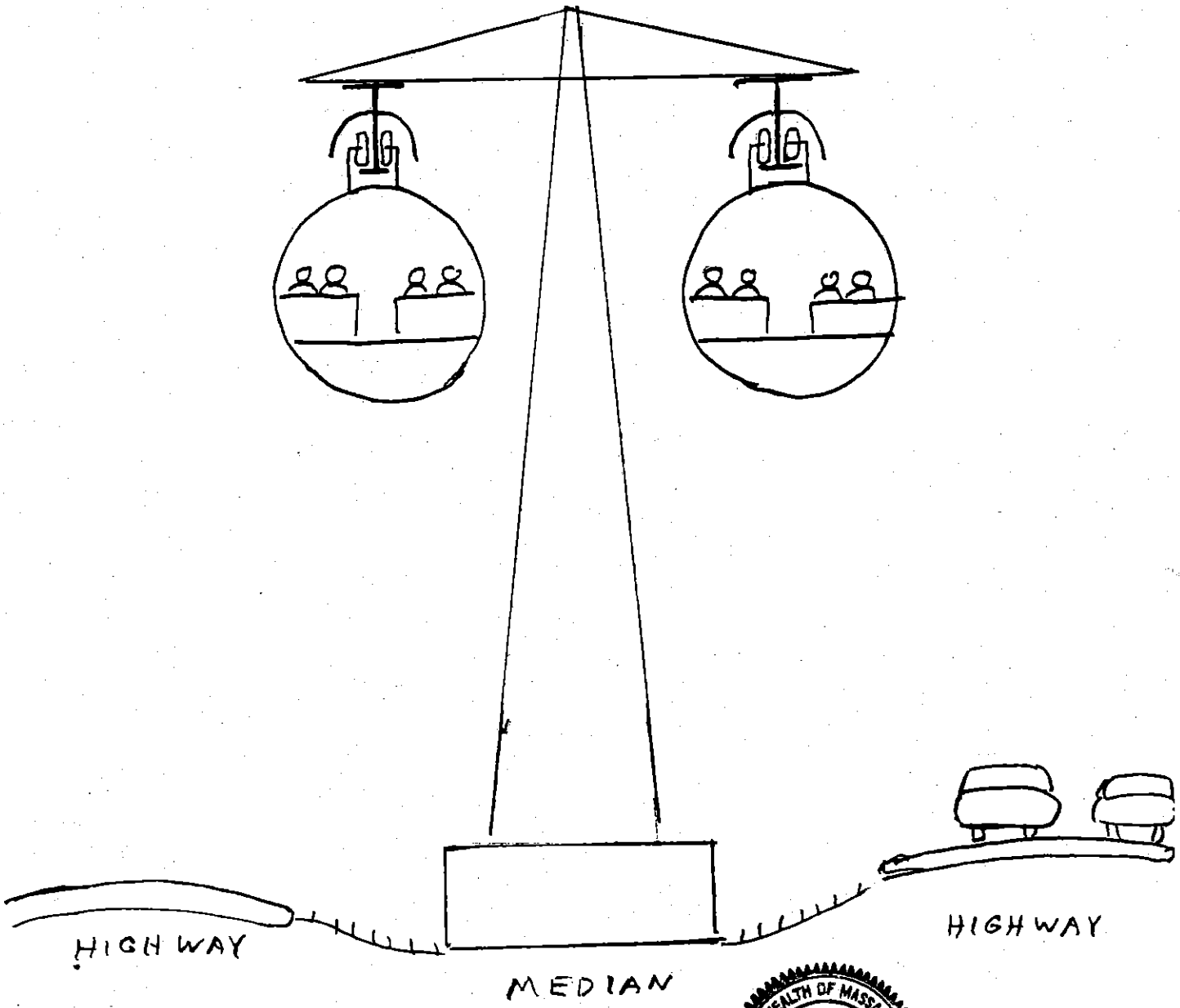
Once the major design parameters have been determined and standardized, the industry would do the designing of the actual cars and parts because of the potential for world wide sales.

The Commonwealth could run a contest for the design giving a prize rather than paying one organization to do the design under contract.

The Commonwealth would devote its major effort to determining where the routes could best go and where the major terminals would be.

Respectfully submitted
Thomas Raphael

COMMONWEALTH OF MASSACHUSETTS
THOMAS
RAPHAEL
No. 10477
REGISTERED
PROFESSIONAL ENGINEER



COMMONWEALTH OF MASSACHUSETTS
THOMAS RAPHAEL
No. 10477
REGISTERED PROFESSIONAL ENGINEER

T. Raphael
12/4/91

12/8/91

Dear Sir or Madame:

I am a Somerville resident who commutes to Harvard University on weekdays ~~Although~~ ~~my~~ by bike. Although my trip is very brief and generally safe, I still feel that it has perils that could be avoided. The intersection of Ibbetson Street and Somerville Avenue, for example, has a flashing yellow light rather than a regular stop light, which in no way deters Somerville Avenue drivers from yielding to bicyclists or auto motorists on Ibbetson Street. Thus it is difficult to cross Somerville Avenue, as a bicyclist, to enter the underpass between Somerville Avenue and Beacon Street. The other danger of this route is the ice on the neighborhood streets in the winter, and on bike lanes. It seems to me that ice on major roads is removed much more quickly than ice on bike lanes.

The mass transit system certainly leaves much to be desired. The buses run very infrequently; the 87 bus to Davis Square, to name the one I most frequently use, runs every 27 minutes. Even fiscally ~~ailing~~ troubled New York City, for all its notorious inefficiency, has its buses run every 15 minutes during non-peak hours. To get people out of cars, the mass transit authority has to provide a more efficient bus system. To get irresponsible, intoxicated drivers off the streets on weekend nights, the mass transit authority must extend the hours of T service. ~~Closing trains at~~ 12:45 a.m. is much too early to close trains. We also need a more comprehensive commuter rail system, to get suburban commuters out of cars.

But most importantly from my perspective, WE NEED BIKE LANES. It would make life easier for both motorists and bicyclists — the former wouldn't have to deal with bicyclists riding much slower than they are driving, ~~like~~ while the latter wouldn't have to worry every minute about getting hit by a car.

Thank you for your time and interest.

Sincerely,

Douglas Stewart

Commuting in a New Century
CTPS
10 Park Plaza Suite 2150
Boston MA 02116-3968

To whom it may concern,

I live at Cleveland Circle in Brighton. I work at Fenwood Road in the Medical Center in Boston. I commute by bicycle or by the "D" line from reservoir to Brookline Village. I use my bike about two thirds of the time, depending on where I'm going after work, the weather, the condition of my bike. It strikes me as odd that there isn't a continous bike path along the Emerald Necklace. One can go from the Fenway to Brookline ave then there's a short strech of no bike path. I ride down rte 9 and at points there is something like a breakdown lane. This could be a bike path or a bike lane. How about having a standard for a bike path just as we would have a standard for a street. We could also improve the T by Ending Free Outbout on the Green Line used mostly by students who could walk a few blocks. The money gained could be use to finance transfers or More Bus shelters. Oregon built more

bike paths and found i more people used bikes so why can'll we? More Bike Paths for less cars, less pollution less congestion and greater safety

Sincerely

Benjamin A Beckwith

Ben Beckwith
16 South St
Brighton MA
02135

Comment #85

19 Phillips Street
Boston, MA 02114

December 13, 1991

Mr. Robert Sloane
Central Transportation Planning Staff
10 Park Plaza
Boston, Mass.

Dear Bob:

Attached are some comments for consideration on the revised Program for Mass Transportation (PMT). Our group, North Slope Neighbors, would like to participate in the PMT advisory committee and other public meetings.

As you may know the North Slope of Beacon Hill was originally part of the West End of Boston before urban renewal. The orientation of the neighborhood is to Cambridge Street, unlike the rest of Beacon Hill and our transportation interests are not necessarily consistent with those of other organizations in the neighborhood.

Many area residents walk to work or commute short distances on the MBTA, to destinations close to downtown. Residents with jobs outside of the core are usually forced to drive and must face intense competion for overnight parking. Many of the proposed and completed transportation projects will have only indirect benefits, such as improved air quality, if the primary focus is peak hour travel. Projects which support reverse commuting, shopping and leisure travel could have major benefits to core area residents, especially if the result is reduced autombile ownership.

The "cold start" problem is significant, not just because ozone eventually is produced, but also in very dense areas, automobile exhaust directly enters houses before reaching sunlight, making volitle organic compounds a problem. Our goal as a neighborhood would be to reduce the need to own an automobile which, in turn, would reduce the amount of use for short trips that might take place.

The future of the Bowdoin to Charles connector is of direct concern because the initial designs would have had a negative impact at

Charles Circle and the poor design would have resulted in little growth in transit use. We believe that a better design could increase ridership by reducing running times and shortening the walking distance at the Charles Street connection. These considerations become very important as the neighborhood is facing the loss of the Bowdoin Station.

Finally, access to regional transportation networks from the core is a priority. Increased frequency, regular interval services and additional destinations would allow core area residents to use services in the off peak direction. Dedicated bus services, connecting with every trip, and shown in the schedules to recreational areas, especially on weekends, would be very desirable and would eliminate one of the major reasons that core area residents own automobiles.

I look forward to this process, and hope that some new transportation projects emerge to improve our mobility and quality of life.

Sincerely yours,

Clark Frazier

PMT Suggestions - December 1991

Clark Frazier

I. Introduction

A statewide strategic plan for mass transit is long overdue and is especially timely given the need to meet the stringent requirements of the new Clean Air act and to anticipate changes in the economic climate, changes in development patterns, changes in the population mix and the need for Massachusetts to remain competitive in the national and the world economy.

Investment in transportation infrastructure now requires such extensive reviews that the lead time for new projects may be decades rather than just a few years. The need to make more efficient and effective use of existing transportation resources is important given limited funds and implementation constraints.

The PMT should be concerned with a wide variety of mobility and accessibility issues, and not just with peak hour access to downtown Boston. Massachusetts is likely to grow more slowly than the national average, given the disadvantages of the climate and the high cost of housing. Transportation usage may grow as incomes increase and jobs continue to disperse and commuting distances increase. Finally, the secular trend to two earner households can be expected to mature in the next few years and the number of work trips per household can be expected to stabilize or decline.

The growth of public transportation may only occur at the expense of private automobile usage, especially in markets, such as downtown commuting, where transit usage is already significant. Actual growth of markets currently served by transit may be low relative to the state as a whole and transit may have difficulty becoming established in the relatively faster growing suburban market.

The MBTA is faced with the need to provide current levels of service more efficiently to increase the possibility of service expansion into new markets and to increase the political support for service expansion. In particular, the PMT should address normative measures, such as cost per passenger mile of various types of services, with the goal of reducing costs, over the long run, to levels consistent with more efficient operators and to insure that capital expenditures not used to expand service are, in fact, lowering operating costs. The MBTA should be able to carry rail passengers in high density corridors at a lower cost per mile than would be possible using buses.

II The Need for New Transit Markets

The PMT should move away from an exclusive focus on rush hour commuting and attempt to address other problems where transit service might increase mobility or reduce congestion. A number of major highways are experiencing congestion on weekends as hordes of leisure travelers attempt to reach destinations such as Cape Cod. The Massachusetts Turnpike suffers from extremely heavy traffic on holidays and summer weekends making the drive unsafe as well as unpleasant. There are likely to be users of these systems who are there because no convenient or comfortable alternative is available. State residents without access to an automobile often face a more limited choice of leisure destinations because public transportation is limited, inconvenient or nonexistant. Intrastate business travel is similiarly locked into the automobile mode because high speed public transportation facilities linking major business centers is virtually nonexistent.

Automobile ownership in the dense urban residential areas in Boston has increased in the last fifteen years faster than income, most likely because of poor public transportation services to leisure weekend destinations or lack of reverse commuting options on express bus or commuter rail lines.

The MBTA should compete in more markets as the Boston Metropolitan area continues to decentralize. Centers close to downtown, such as Back Bay, Kendall Square and the Medical Area lack high speed transit access in all directions of travel. Kendall Square, for example, has Red Line service to the northwest and access to the southeast, but lacks cross river service to the southwest and has very poor links to the north, resulting in a much lower mode split for transit than similiar concentrations in downtown. Commuter rail does not have particularly good downtown distribution and lacks the ability to compete for trips passing through the downtown where the speed advantage of commuter rail could dominate congested automobile traffic through the core.

III. Transit Improvements Which Might Increase (or Hold) Market Share

The MBTA should attempt to offer faster services wherever possible. Surface bus operations continue to suffer from increased trip times and reliability from traffic congestion. Fare collection improvements, such as self service ticketing on the Green Line, could reduce dwell time at stops. The MBTA should aggressively pursue traffic signal preemption capabilities for the Green Line and buses. Faster service could increase ridership and productivity.

The MBTA should introduce timed transfer nodes to minimize trip times for passengers who must transfer. More effective fare collection technology, such as proof of payment and further expansions of the pass program could be used to open more station entrances at no additional operational cost to reduce the access times of passengers. At Kendall Square, for example, a passenger approaching the station from the southeast must walk the length of the station outside before reaching an open entrance (exit is possible at both ends of the station). While many passengers take these inconveniences for granted, some are undoubtedly lost to the system as a result. A transfer and day ticket system should be used to reduce the number of times a passenger must lose paying a fare (or waiting for other passengers to pay).

In isolated cases, the MBTA should be looking to provide more service at off peak times. Crowding and delays routinely occur at night in the Green Line subway when two car trains are replaced with single cars. Two car trains could operate at little extra cost for longer hours if the MBTA could eliminate the need for an operator on each car. New low floor cars for the Green Line will improve access to trains for all passengers, not just handicapped, and could reduce dwell times at major stations such as Park Street and increase capacity slightly. However, the full productivity gains possible from low floor cars will not benefit the MBTA or riders until loading and unloading from all doors is possible at all stops. The commuter rail system will benefit from additional high level platforms, allowing reduction of staff required for ticket collection and manual door operation. Finally, the MBTA should use any new fare collection technology as a means of increasing secruity. If tickets (and in the short term, tokens) are sold from machines, station staff can more freely circulate within the station increasing security.

The MBTA should increase the reliability of operations. Schedule adherance is a problem, particularly on bus lines, despite the high supervisor to driver ratio. More reliable rapid transit operation would allow scheduling of fewer trains to handle existing loads. Some increases in the maintenance budget (or more effective use of maintenance resources) could reduce maintenance costs in the long run, and perhaps allow capital grants for replacement equipment to be used for system expansion instead. Better maintenance would improve reliability and rider perceptions of the system and allow management to focus resources on other problems.

In addition to timed transfer points, the MBTA should be looking to provide regional services at regular intervals and should attempt to maximize service with minimum train miles. Schedules should be easy for the public to learn and use. Switzerland, for example, schedules main line trains on hourly headways with connections at all major points. Seconday services (rail and bus) generally connect with the hourly schedule, giving the intermittent user the ability to plan trips without detailed schedules. The commuter rail plant should be rebuilt to support hourly or two hourly regular interval services. In some cases (Beverly to Ipswich for example), the operation could be scheduled with connecting branch trains to provide higher levels of service without increasing train miles. The Old Colony service planners should consider an hourly base service on the Middleboro line with a connecting Greenbush to Plymouth service where all trains meet in Braintree once an hour. Such a service might not consume any more train miles than a less regular separate services on each line. (Of course, the peak hour operating plan could have direct service on all lines). In order to be a regional rail system, the commuter rail system should support reverse commuting and should have dedicated feeder services (similiar to the Amtrak Thruway buses) which connect with all trains and are shown in the schedules.

IV. Clean Air Considerations

The MBTA must participate in whatever solutions are required to reach attainment under the provisions of state and Federal clean air regulations. In addition to providing public transportation attractive and convenient enough to result in reduced driving, some operational changes may be required. In particular, the MBTA should substitute electric operations for diesel wherever possible. Diesel bus routes that duplicate electricly operated services should be dropped and the fare structure should be

revised so that existing riders are not penalized. The MBTA priorities might be to restore Green Line operation to Arborway and Watertown (Newton Corner) and to extend the Cambridge electric bus operation to Arlington and Newton. A number of heavy bus routes should be evaluated for conversion to electric bus or light rail operation. The Roxbury replacement service should be implemented as a Green Line branch, primarily because ridership would be higher for rail than bus and automobile traffic on Washington Street could be discouraged.

The MBTA commuter rail services should be electrified in connection with the projected extension of Amtrak electrification to South Station. The Old Colony service should be electrifed initially, allowing noise mitigation funds to be used in part to pay for the installation of the electrification. Private sector funding options, such as Boston Edison delivering the power at the pantograph, should be explored. The resulting offset from electrification of MBTA lines might be "sold" to private interests in return for reducing capital costs. Electric operation of commuter rail lines could result in faster service (better acceleration) and lower cost off peak operation using multiple unit equipement and more flexible operations (MU trains could split at junctions). The opposition to nearby train operation would be reduced if operations were electric and noisy idling diesels at terminals would no longer necessitate addtional expensive deadhead moves late at night.

Finally, the MBTA and other public transportation agencies need a level playing field. The Boston (and Cambridge) parking freeze should be applied statewide with strong regulation in areas (such as route 128) where expanded parking will increase congestion disproportionately. Automative Vehicle Identification (AVI) technology should be used for toll collection (as soon as a national standard emerges) to allow congestion tolls and road pricing should be introduced on all key highway commuter links and on the Central Artery. Finally, public transportation must compete for as many nonwork trips as possible to minimize the number of "cold starts" that result from short trips and errands which now require an automobile because off peak services are infrequent or inconvenient.

High Occupancy Vehicle (HOV) lanes should be considered only where public transit services are clearly infeasible in the short term. All HOV facilities should have at least hourly bus service, even if the cost is high at first. HOV lanes paralleling established express transit corridors are more likely to compete with transit rather than with the private automobile. Access to HOV services are likely to not be available to everyone, and have no usefulness except for work trips.

V. Major capital projects

A system of ranking all projects in competetion with each other is needed and should be updated frequently. The economic return of each project should be known before the political selection process is started. In the long run, choices of housing and business location depend on the existence of transportation facilities. The state has the obligation to develop facilities which make jobs accessible to established neighborhoods and allow access to shopping and recreation. The expansion of public transportation into new markets should be paralleled with an upgrading of services in existing markets to allow existing neighborhoods to remain competitive. Transit investment should match highway investment to avoid tipping the balance further against transit. The following is a partial list of projects which should be advanced as quickly as possible:

1. Downtown rail connection, probably on Congress Street with a station at Post Office Square, could release land at North Station for development, increase commuter and regional rail ridership substantially.

2. Circumferential transit would allow the MBTA to increase market share in Kendall Square and the Medical area. Connections with commuter rail in Somerville and the Orange, Green and Red Lines are essential.

3. A regional (statewide) rail system serving diverse needs with regular interval service, including some commuter sheds which cannot support stand alone service. A regional rail system should include timed feeder and connecting bus services. The Route 2 corridor might be a strong candidate for cross state rail service improvements because Route 2 is not as competitive as the Mass Turnpike. The Mass Turnpike Authority (and the Port Authority) should be restructured to take responsibility for intrastate public transportation infrastructure rather than building a second airport or expanding the Mass Turnpike. In particular, the Turnpike Authority has the obligation to provide services to those who cannot make use of a toll road exclusively for private vehicles.

4. The Old Colony should advance, but, as previously mentioned, the noise mitigation funds should be used for electrification.

5. Roxbury Replacement service along the Washington Street and Blue Hill Avenue corridors, which are underserved, should be implemented in a useful form. The proposed electric bus will increase costs but will have few service benefits, so the light rail option should be reinstated.

6. The Red to Blue connection project should be redesigned (in connection with the proposed closure of Bowdoin Station) to avoid increasing the above-ground size of the Charles/MGH station. The loop at Bowdoin should be eliminated, to eventually allow a standard Orange/Blue vehicle design.

7. The South Boston Piers project should be split into phases with an eventual goal of building an eastward facing branch of the Green Line, allowing Newton and Brookline service to terminate at South Station or the Piers area. The idea of a U-shaped South Boston to Roxbury service (slower than a direct bus) which would maximize rather than minimize transfers should be dropped from consideration. A second downtown terminal for the Green Line would reduce pressure on the Park Street to Government Center segment and could allow track realignments at Park Street station.

8. A surface light rail and tourist trolley line connecting the South Boston Piers with the Charlestown Navy Yard using the Surface Artery alignment should be considered in the long term as a means of removing tourist automobile traffic from the Waterfront and encouraging tourist use of more remote (and underutilized) parking facilities on weekends. The projects in New Orleans and Seattle should be instructive, but the potential ridership in Boston may be much higher. One main obstacle to such a project is recognizing that when limited traffic flow space is available is that transit rather than private automobiles should have priority.